

Put aids before staff, i.e.a.s told

Local authorities should spend money on teaching aids rather than on extra teachers, Dr Eric Briault, education officer of the Inner London Education Authority, said this week.

He told a conference organized by the British Association for Commercial and Industrial Education that the present balance in schools between teachers, non-teaching staff and audio-visual aids should be changed. But there would be strong pressure to move in the opposite direction because so many teachers were unemployed.

"In my judgment educationally it would be a mistake to go too far in that direction," Dr Briault said. "There was a danger of paying teachers' Houghton salaries to clerical work."

Dr Briault attacked the detailed

discussion of teacher training numbers by the Advisory Committee on the Supply and Training of Teachers. The difference between an intake of 12,000 and 15,000 was too small to be worth arguing about. "A 1 per cent change in the wage rate can make a complete nonsense of the figures."

The falling birthrate would bring opportunities as well as difficulties. Children in overcrowded primary schools would have more room. Secondary schools would be able to stop using annexes and temporary extensions. But it was hard to say how much these empty buildings could be used for other purposes, such as adult education classes or youth work.

"We have to face the economic fact that you can never save the cost of fewer children,"

Job scheme works well

The Training Services Agency will fund the training of nearly twice the number of unemployed school leavers as last year, said Mr John Coss, director of the Manpower Services Commission.

He told the conference that last year 23,500 young people were given training opportunities in industry with the help of the TSA and industrial training boards. This year the figure should rise to 39,000.

In addition, last year the TSA trained 2,000 young people on its direct training schemes such as the Wider Opportunities Scheme, and occupational selection courses. This year the figure will be at least 7,000.

The job creation programme was also giving work to school leavers. This autumn about 34,000 young people under 24 were likely to be on the programme. In spite of what critics said, the job creation programme provided worthwhile

jobs offering authentic experience. The quality of projects was uneven to start with but was now improving. All these measures made a major contribution to providing jobs for young people. But they were not enough, said Mr Coss.

We cannot be satisfied with our arrangements for young people entering work until every school leaver without exception has a proper opportunity to go into a permanent job or begin training or receive some other work-related experience, regardless of where we are in the economic cycle and regardless of what part of the country he or she may live in.

A later speaker, Mr John Coss, who is responsible for British applications to the European Social Fund, said that they were not interested in contributing to activities that were education rather than training. The fund was mis-named. It was really an employment fund.

Employers suspicious of exam changes

The Schools Council came in for a scorching attack from Mr Barry Collins, group training manager of Rubery Owen. He told the conference that most employers were suspicious of the proposed changes in school exams.

"In all this, the Schools Council maintains an unremitting air of intolerance towards the real needs of the society in which we all exist. I find the structure of the Schools Council and its various committees alienated in the extreme—small wonder that their proposals incorporate teacher-control of all school exams."

There was now a plethora of new courses and exams for those in full-

time education. They reminded him of Peter Pan who never wished to grow up.

There was now a stronger case than ever before for an education consumer advisory council. There should also be a drive to give teachers some experience of work.

"Unless we can do something to produce teachers who are more knowledgeable about the employment of society, whose perception of the world has moved since the writings of William Blake or the engraving of Gustav Dore, then our newer courses and examinations will do little to assist in the presentation of a sound vocational guidance."

It looks as if we are about to experience a prolonged period of racial strife. The causes are many and various, and the social sciences pronounce with confidence on the relative importance of race, class and the one extreme and depressed economy at the other. How to distinguish symptoms from disease in racial affairs is always difficult; in this case it is near to impossible.

Thus, while it is hard to believe that the inflammatory statements of the extremists are without independent effect, there can be no doubt that the seeds of racism are being sown in fertile soil and in a favourable climate. Even if our theories are deficient, the facts of the matter are plain. Peter Walker and especially of the Birmingham school, suffered by the West Indians, not least but also as compared with other immigrants.

This is not to say that there is no discrimination against Asians or Cypriots, but it is to acknowledge that the circumstances of West Indians are worse. (Incidentally, I use the term 'home population' as it is as well to remember that there are many black Britons who have been here as long as and are as well established as whites.)

Now, there are some who say that none of this matters, that freedom of choice implies freedom not to associate with blacks and freedom to discriminate against them. Most, however, this is rejected on the

theoretical grounds that the very liberalisation with which freedom of choice is so closely bound up is actually not as part of some broad group, membership of which is incidental to their character and behaviour. More pragmatically, it bears the appalling consequences of racism where it has been allowed to dominate society.

I am bound to point out in this connexion the extraordinary lengths that racists will go to in order to justify their propensities. It is nothing about the minority as such which is disagreeable, simply some have. My favourite example is to be the ice cream firm which did not take blacks because their skins were too black to be served. In education, of course, the blacks do not happen to be clever enough, just as the Jews were too clever.

Philip Venning reports from the BACIE conference

1 in 10 has no idea of work

Fewer than one pupil in 10 has work experience, according to an unpublished survey by the Institute of Careers Officers. Preliminary findings were given to the conference by Mr J. B. Black of IBM, who was deputy director of the Trident Project for three years.

Mr Black said the survey, updated one carried out in 1968-69, showed that well below 10 per cent of primary school children had work experience. He said the survey was still uncertain about its purpose and benefits. The abuse of work experience by employers was rare but administration varied widely in quality and in some cases left a lot to be desired.

Work experience could be used either as a means of vocational guidance or as a part of general education. The first line of attack, Pupils might be persuaded for a career on a fleeting impulse, and it was impossible to satisfy pupils whose job choice was not in the local area.

Its value was that it allowed pupils to experience the sometimes traumatic changes in personal relationships between school and work. If they made mistakes, these could be put right without the tension which often accompanies a person's first job.

"In gaining this experience the pupil acquires a sense of self-confidence and self-reliance based on his own efforts rather than on some untried and untested self-assessment."

In discussion afterwards, Mr Black said there were some jobs where, for reasons of safety or other, it was impossible for a pupil to do the job. One of the main difficulties was finding a work that a pupil could pick up in a few days which was nevertheless worth doing.

Earlier, Mr Peter Dines, joint secretary of the Schools Council, said the conference that employers should not look to public examinations as a guide to the literacy or numeracy of school leavers.

While accepting the need for people to be numerate and literate, it was essential to define what the terms meant. It was not enough for a school leaver just to be able to read or count. "There must be something to communicate in a literate person."

This would require a much higher standard of testing mechanism than was offered by present public examinations.

PERSONAL COLUMN

Maurice Peston

Wrong end of racist joke

This leads me to education. What contribution can schools make to solving these problems? Before providing an answer it is necessary to emphasize what contribution schools cannot make. They cannot overcome all the difficulties of housing and the like. If black youth live in the worst housing, if their father is badly paid, and their mother works full time, there is little the schools can do about that, especially in the short term. Similarly, if these young people are badly treated when it comes to employment on leaving school, the school has no power to help them, mainly with the DES.

On the positive side it seems to me that the DES were correct in placing their policy mainly within the broad area of deprivation and under-achievement. Poor black people are not wholly different from white people, and they do not gain by always being treated separately. Where there are causes home and especially lack of support before the child is of school age, the remedial measures may be similar.

But, having said that and hoping that it will not be long before the new unit starts to achieve something, it is entirely wrong to think there is no racial problem at all. There is, the straightforward

Too many graduates lack numeracy

A call for a more broadly-based curriculum at secondary school and at university level to produce graduates able to adapt to the needs of modern industry was made this week by a member of the Council for British Industries.

Sir Donald Barron, chairman of Rowntree Mackintosh and a member of the University Grants Committee, said that British industry needed graduates with a greater width of knowledge rather than a greater depth. The education of the arts faculties, particularly in the sciences, was still too narrow and based, so that they could not readily relate to renewed disciplines.

"The rigid separation of arts and sciences is still all too obvious. Many graduates lack numeracy and statistical literacy and this has its roots in the secondary school curriculum. I hope this will improve with the new changes proposed for the secondary school certificate," he said.

Sir Donald, who was speaking at the Conference of the Standing Conference of the Standing Conference of Graduates, said industry itself was uncertain about the jobs that had to be done in the future. The industrial environment had changed considerably in the last 10 years, and in this state of indecision the only

'Creeping palsy of failure'

The only way out of Britain's "creeping palsy of failure" is the enhancement of the part-time education offered to young people at work," said Sir Alex Smith, chairman of the Schools Council and director of Manchester Polytechnic.

The day release concept was dead, and education needed a new structure—something like sandwich courses—combining the best of both education and industry, he told the IEA's Further Education Curriculum Project in Communication Skills at Rachel McMillan College on Monday.

British "esteem of scholarship" had fallen the country. The result was an increasing number of social business studies graduates offering a surplus of social theoretical knowledge, while education neglected the development of inventiveness and imagination in the industrial arts.

"Can we really be satisfied with an education system which happily dumps £14,000 to produce a PhD while it commits only £3,500 to the 'others' who leave school at 16, part of the 400,000 'others' who leave school with less than one to four O levels?"

The spiralling decline in exports and the ever-increasing numbers of unemployed in Britain, he said, were related to the burgeoning number of degree courses in the

than the contributions they make. In other words, it is not the fact that they exploit us, quite the contrary.

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Big fees rise 'will help rates'

University fees for students, from £100 to £150, are to rise next year, Mr Fred Mulley, the Education Secretary, told the House of Commons this week.

"Here was a case where a single employer, when a figure could be mathematically put, completely disrupted the student plan ahead," Sir Donald said. He also called for stronger links between higher education and industry. Employees should be encouraged to learn new disciplines and skills, and sometimes this involved a period of postgraduate education. Employees should conduct research at universities which would be relevant to industry.

Career advisory work in schools was still at a rudimentary stage, Sir Donald told the day release concept was dead, and education needed a new structure—something like sandwich courses—combining the best of both education and industry, he told the IEA's Further Education Curriculum Project in Communication Skills at Rachel McMillan College on Monday.

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IQ iniquities in child care claim

A major rethink is needed of the way young offenders are treated, and until it is done, plans to put more of them behind bars should be shelved.

This was the conclusion of a conference last week organized by the Howard League for Penal Reform. It was their first opportunity to discuss the Government's recent White Paper on the 1969 Children and Young Persons Act. The White Paper called for more secure accommodation for juvenile delinquents in borstals, detention centres and secure training centres, and for a new institution, the Youth Training Centre, to be built in the community.

The trouble was that there was nowhere else, and it was the subnormal teenager who spent longest in the system. But given the lack of alternatives, why not go for a secure establishment must find somewhere else for you."

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There was also ambivalence within the professions about delinquency and how it should be treated. Research suggested that whatever approach was adopted the effects were much the same. The 1969 Act, which made a preventive approach possible, was adopted at a time when the professions had little enthusiasm or energy for thinking up new strategies.

Mr Masud Hough, principal of Aycliffe training school, Durham, thought delinquency was not a suitable case for treatment. It might be possible to treat a delinquent, he said, but not delinquency.

Delinquency was usually one end-product of a social and family set-up in which the social services were powerless to intervene. The very restricted social skills of a large family, low intelligence and criminal parents. Another was the break-up of family life.

More secure accommodation was not the answer. "What we want is not more accommodation of this kind or even staff. What we want is a much clearer idea of what we are doing."

"You can break a child's heart when, as 'treatment', you remove him from home, and you simply confuse him when, for punishment, you coo to him in secure accommodation with beautiful meals and colour television."

It would be more constructive to catch delinquents earlier. Some children look up their careers of casual crime because they thought they would not be caught, and seven times out of ten, they were not.



Philip Venning on the Tameside court case and Mr Colin Grantham, leader of the council, after the High Court hearing.

Mulley and rebels wait for ruling

The High Court was due to meet at the end of this week to give judgment on whether Mr Fred Mulley, the Education Secretary, was within his rights when he intervened in Tameside.

Both sides presented their cases on Monday to Lord Widgery, the Lord Chief Justice. Mr Justice May, Lord Justice Cusack. But the hearing was adjourned before the closing speeches and judgment had been delivered.

The court was meeting to decide on the legality of Mr Mulley's intervention and whether or not to grant a writ of mandamus. This would force the Conservative-controlled Tameside Council to comply with his direction to drop the plan to keep five grammar schools.

Mr Anthony Lloyd QC, for Tameside, said it was a question of whether the Secretary of State had acted lawfully in the sense decided by the Padfield case in 1968: that he had taken into account all relevant factors and had not considered anything external to the case.

The true construction of Section 68 was whether the council was proposing to act in a way in which no reasonable council would act. A House of Lords decision case in 1971 had established that two reasonable parents could come to opposite decisions without forfeiting the right to be called reasonable. The same applied to Tameside and the Secretary of State.

The Secretary of State might disagree with what the council proposed to do. He might regard the best interests of the children of Tameside. But this was not enough. The reasons given by the Secretary of State are wholly inadequate.

In view of this he must have misdirected himself, or been misinformed or taken some extraneous consideration into account. Because he was piloting the Education Bill through Parliament, it must have been very difficult for him to exclude political considerations.

In the way they had handled their proposals the council had gone to considerable lengths to be reasonable. One example was the fact that those who had been allocated to grammar schools before the local elections would be allowed to remain.

"This is not a case where the council are against comprehensive schools as such. What they are opposed to is a scheme which they think has been rushed through before it is ready to the great detriment of the existing grammar schools."

Mr Lloyd analysed the reasons for intervening given by Mr Mulley in his letter to Tameside and quoted affidavits from 87 teachers who were opposed to the Labour council's scheme. He asserted that under the Tory scheme the number of pupils whose future was uncertain was small. Most of the staff would stay on at the same school, and almost all the special building work would be used.

Even though the council did not have the support of the teachers' consultative committee, there were enough teachers willing and able to carry out the selection tests in time. There was still time even now.

Paeans of praise for fees package

Mr Fred Mulley, Secretary of State for Education and Science, was almost overcome on Tuesday by the warmth of the praise showered on him by Mr St John-Stevens, the Opposition spokesman on education, for his decision to increase tuition fees for home and overseas students and abolish parental payment.

Indeed, MPs on both sides of the House reacted favourably to his package announced on the previous day.

Mr St John-Stevens said Mr Mulley was to be congratulated on standing up to the Treasury mandarins, on ending the distinction between overseas and home-based students and on exempting tuition fees from the parental contribution.

Mr Mulley said it was important to emphasize that when the fees for overseas students were put up in 1967-68 to £250 they represented 24 per cent of the average costs "and the £650 which I propose they should be in 1977-78 will only represent 16 per cent of what we expect them to be the average cost".

Mr Keith Hampson (Ripon, C) had asked earlier how the £650 figure was arrived at. What would be the extra cost to the Treasury of meeting tuition fees at that level? Did it mean a rundown in real value of the maintenance award, leading possibly to a loans scheme? Would there be a safety net for universities? What proportion of income would come from fees if their numbers fluctuated wildly?

Mr Mulley said Mr Hampson seemed to embrace disaster with too great alacrity. None of those disastrous things would happen. He was separating fees from maintenance because it had been widely misrepresented to him, especially by many students, that a great number of parents did not put their children in receipt of the balancing amount they needed to pay the fees for maintenance. So none of Mr Hampson's fears on this score would arise.

The total extra expenditure under this heading would be about £3m which was more than offset by extra income under other accounts. Normally the income of universities would be considered by the UGC as part of the general annual arrangements for their support grants.

Mr Bryan Davies (Enfield, North, Lab) said many Labour MPs congratulated Mr Mulley on ending the home-based distinction between the fees of students and overseas students and on resisting the worst possibilities of the most savage increase in fees for overseas students.

Nevertheless, he should bring to the attention of the Minister of Overseas Development, Mr Reginald Prentice, the necessity of offering support to overseas students in the face of the fee increases.

Unions 'fail to back' jobs-for-all move

The Secretary of State had done his utmost to encourage I.L.E.A.s to employ as many teachers straight out of colleges as they could, although he had not had the total support of the teacher unions, said Miss Margaret Jackson, Under Secretary for Education and Science, when questioned about unemployment.

It was not necessary, she said, for trained teachers to take their probationary year immediately after leaving college. Frequently about 20 per cent of them did not go into teaching in maintained schools, although it was true that they might find themselves at some disadvantage in later years. It had always been the case that I.L.E.A.s made a choice between new people leaving training colleges and people with greater experience.

The recent White Paper on public expenditure included provision for the employment of 464,000 teachers in 1979 compared with 459,000 in 1976 and 410,000 in 1973.

Mr Mulley said that uncertainty about trends in wastage from and re-entry to the profession made it impossible to give a detailed assessment of employment prospects. These should become clearer when he had received returns from all I.L.E.A.s about their staffing intentions for the next school year, but he thought it probable that a substantial number of newly trained teachers would not get appointments this year.

His department was considering

Mulley backs down on 'theft'

There were heated exchanges on school curricula in the Commons this week.

Mr Frederick Mulley, Secretary of State for Education and Science, told Mr David Maud (South Bedfordshire, C) that as Secretary of State he had general concern and responsibility on school curricula questions. Responsibility for them was placed by statute on I.L.E.A.s and school governors and managers, he said. Mr Maud then urged talks with I.L.E.A.s to see if school curricula in the last few years of schooling were satisfactory, bearing in mind the shortages of skilled labour developing in the labour market. There was anxiety that curricula in schools were not sufficiently geared to what industry needed.

Mr Mulley said that if Parliament wanted to reassign the responsibility then it was a matter to which they could give further thought. The C.B.E. and TUC were concerned about this issue and were working out with the Schools Council a course that he hoped would assist curricula.

Mr St John-Stevens, chief Opposition spokesman on education (Chelmsford, C), said that since the Permanent Secretary, Mr Hamilton,

Reports by Alan Wood



Mr Lightfoot leaves ILEA top job

Mr Martin Lightfoot has left his post as senior assistant education officer with the ILEA. He was replaced by Mr. J. H. G. Jones, who was formerly one of the top four jobs in the largest education authority, which carried with it a salary of £10,000.

It came only a year after Mr Lightfoot had joined the ILEA as assistant education officer, responsible for public relations, research and development of relations between the London boroughs and the London Metropolitan Authority, a job which had been created for him.

Before he joined the ILEA, Mr Lightfoot, who is now 50, was acting director of People's Education and as such had been in the vanguard of the new education section in the Labour Party.

His resignation was a personal decision, he said, to make clear that he was not doing it for the ILEA but for the Labour Party, and that he was not leaving the party (due to be announced next day).

He has no plans at present to leave the party, he said, who know him from his public days do not, however, think so valuable a commodity will be at a loose end for long.

North-East curbs CEE experiments

An exam board in the North-East has put the brakes on experiments with the Certificate of Education because it thinks the exam will not be approved by the North Regional Education Council. The North Regional Education Council has written to all the schools in the region, which submit pupils to the CEE, saying it cannot accept the dates in 1977 must be those schools which submit pupils for this year's test.

The CEE was recommended by Mr Mulley last month by the Council as a new exam for schools who did not want to follow the C.B.E. A level. The board said it was a decision on the exam which Mr Mulley, "there may now be some doubt concerning the future of the CEE in its present form, but it cannot responsibly accept any other schemes."

"The board cannot commit its resources to the examination of the status of the examination in the value to students in the region are clear."

Heads in the North-East are at the board's decision. Mr J. H. Branch, principal of Tynemouth College, said "this week the heads had protested vigorously. The board's attitude was a sharp contrast to the response of five GCE boards, which have just affirmed their faith in the future of CEE by forming a committee to develop courses in the region for 1977". He said

Now governors face axe too

Mark Vaughan

They could face another round of cuts in education, including pupil-teacher ratios, self-owning surplus library books and down the number of governors.

His follows a report, released by authority this week, drawn up by senior officers after two days' investigation. Called "Retrenchment", it is a session document and has no conclusions about what should be done to save more money over the next few years.

It gives no clue as to when the cuts should be implemented, but points out that there is to be, "at best", a standstill in the authority's expenditure for the next three years. Unless there is to be a "complete, fossilized" of survey services it was vital to find new methods of challenging the authority's policies.

The savings they suggest affect all the authority's services, but education is the worst hit. The report has been accepted by the authority's policy and coordinating committee.

One reason given for more cuts is that the natural wastage of the teaching staff is not being replaced by as much as expected. The report says that the number of school governing and managing

bodies could be reduced to save administrative time and reduce travel costs. It could be given greater responsibility over capital allowances to encourage them to control spending.

Duplication of courses at sixth-form colleges and technical colleges should be stopped. The report also suggests moving equipment from one school or college to another. Another suggestion is to close the I.C.A.'s two boarding schools (Ottershaw and Sheep Heath) and to stop taking up places at independent schools. Other suggested closures include a centre for in-service training of teachers, and the authority's youth sailing club and school camp.

In further education, the report suggests fees should go up to cover the true cost of courses, and that similar courses should be provided at fewer centres. Fewer Surrey residents should get grants for courses outside the county.

The county's library service, the report says, is already the second lowest in the country and any further reductions would lower standards even further. But as well as suggesting the sale of surplus library books, the report also floats the idea of selling advertising space in libraries.

Surrey first reduced this year's budget in November. In February a

second round of cuts on all services had to be made after the county came out worse than any other county under the new restraints rate support grant.

"In presenting our list for consideration we know that many items are matters on which teachers and their unions have strong views. We have not been able to consult directly the teachers' representatives and we urge that this be done if any decision is reached to investigate further any of our suggestions."

Mr Barry Taylor, CEO for Surrey, has asked the DES to relax some of its regulations, particularly those covering school meals and transport "so that I.C.A.s can make a much more positive contribution to saving public money."

"Most mums would find trying to cook by the department's rule book a daunting prospect. We cannot even cut out the pudding course and replace it with apples and oranges because it is said to upset the nutritional balance."

Instead of withdrawing all discretionary school transport, which the council is likely to do next month to save £150,000, Somerset would much prefer to charge parents but could not because of present regulations.

Jobless may retrain as maths specialists

A scheme to retrain unemployed teachers into mathematics specialists has been put to the Department of Education by Lancaster University. It would provide places for 60 jobless teachers and give them a better chance of finding work next year.

Professor Alec Ross, director of the university school of education, said last week that the plan would convert a selected group of unemployed teachers into mathematics specialists during a one-year course. "The profession is looking for recognition of the special problems facing its unemployed members. At the same time the schools need more and better teachers of mathematics."

Details of the scheme still have to be worked out and the submission to the department asks for approval to be given for a preliminary exploration. Preston Polytechnic and St Martin's College of Education, Lancaster, have agreed to cooperate if support is given.

Professor Ross hopes that the department will allow the students to claim postgraduate grants. The programme would consist of mathematics for half the time and micro-teaching and practical experience in schools for the rest. If more than one teacher training establishment takes part, two types of course will be offered.

"We are aware that there are two schools of thought about the content of such courses and we would like to run parallel groups; one would focus upon new mathematics, the other on traditional mathematics. Students would be encouraged to apply for posts while they were following the course."

Another project suggested to the department tries to deal with the problems of newly trained teachers who cannot find a job in school to complete their probationary year and become fully qualified.

Professor Ross said the new teachers would be given special grants by the department so that they could be attached to schools as supernumerary teachers.

"We feel sure that the professional associations would cooperate to ensure that the probationers were not used to fill established vacancies. There would have to be an agreement on the maximum number of days for which a probationer could be used to cover an occasional absence."

Philips Audio-Typing Competition for students

Winner of National Final £700

Miss Leila Patterson of Napier College of Commerce & Technology which receives Philips equipment to the retail value of £150 and holds the Philips Trophy for one year

Regional Winners (£50 each)

Colleges receive Philips equipment to retail value of £50. Results not in order of merit. All qualified for final.

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N.W. E. Lampkin
Millbank College of Commerce N.E.
Barnsley College of Technology S.W.
North Devon College W. Mid.
L. Horton
Warley College of Technology E. Mid.
M. Norman
Brookby Agricultural College N.H.C.
M. Chamberlain
Cambridge College of Arts & Technology Lon.
T. M. Anderson
South East London College S.H.C.
A. Woodhouse
Eastleigh Technical College

Second Prize £275

Miss Elizabeth Robinson
Driffild Institute of Further Education

Third Prize £150

Miss Tina Tonge
Cherfield College of Technology

Regional Runners-up (£20 each)

Results not in order of merit. Denotes qualified for final by merits

Scot. M. Wilkins
Dundee College of Commerce N.W.
A. Shawcross
Wigan College of Technology N.E.
E. Robinson
Driffild Institute of Further Education S.W.
K. Brambleby
Colyton Grammar School W. Mid.
L. Janowski
Bromsgrove College of Further Education E. Mid.
T. Tonge
Cherfield College of Technology N.H.C.
D. Turner
Chelmsford College of Further Education Lon.
A. Frame
Tonham College of Technology S.H.C.
S. Millard
Eastbourne College of Further Education

Other Finalists (£20 each)

Qualified for final by merits

E. Smithers/Windor & Maidenhead College
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TES-2

form political will into reality. In fact, the decision to go offensive depends, through the

the same proportion in all size was connected with discipline and stress," said the minister, Herr Grieszmann. In one case, the original building was divided into two; in another a second building

and standards whenever
are discussed, in West Ger-
the emotive key-word is
stress. If it is really
ned that comprehensives
nate it, they may have a
here after all.

Mr Tom Clarke, a senior report of the Education Commission says the average school in the country now has 30 CSE or GCE pupils. In many ways this is a good thing but it may have disadvantages. The examination system is used by employers for recruitment and not always in a discriminating way. Success in examinations certainly

school leavers reaches maturity." The field careers service is now working with the Medical Research Council on a survey of attitudes of school leavers to issues.

Successful applicants will be issued with tickets during the month of August. Ticket prices range from 40p to £2.00.

Life got complicated 1,400 million years ago

One of the persistent arguments amongst biologists concerned with the origin of life concerns the age in which complex life forms, such as cells with nuclei and other membrane internal structures, first appeared. All parties to the argument agree that the first relatively simple organisms were prokaryotes, or bacteria, which were cells without nuclei of any kind, and there is little dispute that these first rocks are 2,000 million years old.

There is, however, two opinions amongst biologists about the complexity of the first complicated cells, and the view that they are called. Some biologists think that the first appearance comparatively recently, say between 800 and 600 million years ago. Others consider that eukaryotes, may first have turned up early in the pre-Cambrian, perhaps 1,400 million years ago.

A powerful salvo in aid of the second school has now been fired by J. William Schopf and Dorothy Zeller Oehler, geologists from Los Angeles and Cambria respectively (Science, 2 July). For one thing, they have produced some splendid photographs of microfossils from some Australian rocks at Bitter Springs which show, among other things, the internal structure characteristic of complicated cells. The rocks are 1,400 million years old.

For another, they have collected strong evidence of other people's microfossils to show that there was a quite sharp increase in the average size of microfossils roughly 1,400 million years ago—an increase which is by itself indicative of the emergence of cells more complicated than the prokaryotes.

The largest microfossils so far found appear to be these recently unearthed in the Soviet Union, and which are no less than half a millimetre across. They are found in rocks just over 1,000 million years old and their presence there is a sure proof of the antiquity of eukaryotic cells.

Leavers who think they're too good

More school leavers think they are too good for boring jobs because of the new examination passes, according to a new annual report of the Careers Service.

The report says the average school leaver may be a good thing, but in many ways this is good thing may have disadvantages. "School leavers' systems are used by employers for recruitment and not as a discriminating way."

Success in examinations certainly raised young people's aspirations. "The demand upon employers to provide more satisfying forms of work, not only in economic terms but by job enrichment or through industrial democracy can only increase as the present generation of school leavers reaches maturity."

Sheffield careers service is now cooperating with the Medical Research Council on a survey of the attitude of school leavers to these issues.

Asbestos danger

Asbestos insulating material at Hexham County Grammar School, Northumberland, has been replaced as a matter of urgency at a cost of about £1,000.

The danger of the asbestos was revealed in a preliminary survey undertaken by the county architect. When a full investigation is complete, replacements may be needed at other schools.

Teachers to be offered 'in-service' factory work

from Mike Duckenfield

STOCKHOLM 1960s. All 15-year-olds get three weeks of work visits and all 16-year-olds spend two weeks in full-time employment.

Earlier this year, Mrs. Lena Hjelm-Wallin, Schools Minister, instructed a Government commission on teacher education to look into the possibilities of making work experience outside school a prerequisite of training. The minister said that job experience could either be made a requirement for admission to training or a precondition of getting a teaching job. The commission, set up in May, 1975, is not expected to report until next year or 1978 (725, March 19).

The increasing switch of teachers to university training is being made easier due to the drastic decline in the need for new teachers. Figures recently published by the Central Statistics Bureau show that only one in 50 graduates can now find teacher training places compared with almost one in five eight years ago.

In 1968, when there was a large shortage of teachers, 37 per cent of graduates went on to further studies. Latest figures for those graduating in the first three months of last year, show that six months after graduation only about 14 per cent were continuing studies with only one in seven in teacher training.

Prospects are unlikely to improve during the next eight years. Entry quotas for colleges of education coming into force this autumn will mean that the number of places for potential class teachers—those teaching seven to 13-year-olds—will be more than halved and places for subject teachers instructing older pupils will be reduced by slightly more than one-third.

The training of class teachers will be phased out at six of the 15 colleges of education and that of subject teachers restricted to the "Big Six"—three fewer than at present.

Holland

Industry hits at 'irrelevance'

from Arnold Lissauer

AMSTERDAM The Council of Netherlands Employers Associations has accused the Government of not being sufficiently aware of the educational needs of industry.

The employers, who are calling for a National Education Council where all educational aspects can be permanently discussed, argue against the extension of compulsory education up to the age of 18 and regret that the Government has not given any estimate of the costs of its proposed educational innovations.

The council has also issued a discussion paper about educational

leave for employees. Costs, it says, should be borne by employers, employees and the educational authorities.

The employers think, too, that there is a wide gap between what education is providing and the industry needs.

While there appears to be a surplus of skilled school-leavers, a shortage of jobs does not demand those skills, they say.

Out of the total working population only 18 per cent is unskilled while up to 13 per cent has had some form of further education. However, only 4 per cent of those will find a job suited to their educational attainments.

West Germany

Ministers seek ways to ease unemployment

from David Dungworth

Last month's meeting of the Conference of Länder Education Ministers approved a number of proposals put forward by a working party on how to deal with teacher unemployment.

The working party called for a greater willingness by some of the Federal States to employ teachers resident in other Länder, for additional courses in colleges and universities to assist students to switch from teacher training to other professions like management, translating or interpreting and for measures to channel students away from primary and secondary education and into the vocational schools.

It also recommended changes in the law governing the conditions of service for Beamte (State employees) to allow teachers voluntarily to reduce their working hours by up to half with a corresponding cut in salary. At present this is possible only when a teacher has children under the age of 16 or is ill.

It is felt that such an option might well prove attractive to married women and older members of staff and the funds thus released would enable more posts to be provided for newly qualified teachers.

Earlier forecasts for West Germany would have 10,000 unemployed teachers by September now seem somewhat exaggerated. The teachers' union, the Gewerkschaft Erziehung und Wissenschaft, puts the total between 6,500 and 7,000. It estimates that between 2,000 and 3,000 teachers will be unemployed in Bavaria, between 700 and 1,000 in Hesse, Lower Saxony, Rhine-land and the Saarland, about 400 in Schleswig-Holstein, 100 to 300 in the city states of Bremen, Hamburg and West Berlin.

Only Baden-Württemberg and North-Rhine-Westphalia will have vacancies for all new entrants to the profession whose examination grades are satisfactory.

Accurate figures are impossible to obtain because teacher employment is the responsibility of the different Federal Länder and no national registry of unsuccessful applicants is kept.

Individual Länder are using a variety of methods to reduce teacher unemployment, both in the immediate and the more distant future. The most popular is the granting of temporary contracts.

Many of these offer only half or two-thirds of the hours worked by full-time staff and thus make it possible for education ministries to take on up to twice as many people as there are posts.

Since newly qualified teachers are not entitled to unemployment benefits even such appointments are normally more attractive than the social security payments on which they would otherwise be dependent.

United States

Los Angeles takes lead in banning 'junk' food



from Michael Binyon

WASHINGTON The Los Angeles City School Board is considering a recommendation to ban the sale of "junk" food—sweets and carbonated drinks—in student shops in the city's junior and senior high schools. The recommendation was made by an ad hoc "junk food committee" comprising school administrators, teachers, parents, doctors, dentists and pupils.

The committee began a six-month study last autumn at the request of Los Angeles' School Superintendent after a number of complaints over the sale of junk food in schools and publicity about a possible link between junk food additives and hyperactivity.

The committee reported that there was no well-documented research to show that these additives did contribute to hyperactivity—something that occurs 10 times more frequently in boys than girls, and for which there is no real diagnosis and treatment. But it raised questions about the value of sweets, popcorn and soda that are sold.

Profits from these sales are usually spent on extra-curricular activities, such as athletics, drama and student government. The committee reported that last academic year pupils spent over \$1,600,000 on junk food, earning student shops then \$500,000.

The committee urged Los Angeles to ban the sales of all sweets and carbonated drinks in student shops and make up the loss of revenue by a general purpose tax revenue. It also said school cafeterias should stop selling carbonated drinks and adjust food prices to make up for the losses.

School districts in Texas, Maryland, Indiana, New York and Wash-

ington DC have already set up committees to look into a ban on junk food sales. Virginia has resolved to ban the sale of sweets, chewing gum, soda and flavoured ice lollies in schools from the beginning of the next term.

In the last few months there have been frequent arguments over nutritive value of school lunches. Places where the cost of school meals has risen sharply, and there is a danger that children from poor homes not getting a proper diet.

As in many countries in Europe there is growing concern that children are being fed at home on unvaried diets of convenience foods: usually, fast-food restaurants, hamburgers and soft drinks with enormous quantities of Cola.

At the moment the Federal Government is directly involved in aiding the schools with some \$15 different programmes which together cost \$2,800 million.

President Ford has urged schools to simplify the Federal Government's direct involvement in aiding the schools with some \$15 different programmes which together cost \$2,800 million.

The President also wants to see a special milk programme, which overlaps with the food stamp programme which pays for three meals a day.

Last year Congress passed a nutrition programme laying standards for school meals, dependent on the school's income. An attempt was made by President Ford. There is little expectation, therefore, that the President will persuade Congress to have another look at the complicated issue this year.

THE TIMES EDUCATIONAL SUPPLEMENT 9.7.76

Steering clear of political extremes

The Stockholm-based International Association for the evaluation of Educational has just completed a 10-country survey of civics teaching.

Almost half the civics teachers in the 10-nation survey agreed to speak out in class about political and other extreme issues. (A review of the survey, which involved 5,381 teachers from Ireland, the United Kingdom, New Zealand, Federal Germany, the Netherlands, Italy, Sweden, Finland, Israel and Iran, appears on page 22.)

The "dos" were allowing pupils to express their views in class, permitting the distribution of enterprise literature and personally speaking out against racial discrimination and in favour of political and economic union in Europe.

The "don'ts" included explaining the reasons for preferring one party over another in a national election, including the government, saying that the country was too much ruled by experts. Only 35 per cent of Irish and 45 per cent of American 14 year olds made the correct choice of definition.

Excepting Ireland, where pupils in civics was highest, the interest in civics was generally low in countries where tuition stressed learning facts and memorizing dates. In addition, where pupils scored highly on democratic values they scored badly on support for the national government and citizen participation.

Discrimination against coloured people was highest in Federal Germany and Israel, where 14.1 and 17.3 per cent thought they should have fewer rights. Similarly at the older, pre-university age as many as 13.3 per cent of Swedish favoured fewer rights—a figure more than twice as high as for any other country at that age level.

Religious discrimination was strongest in Ireland, Italy and Germany where 21.6, 15.6 and 14.6 per cent of 14 year olds favoured more than average rights for religious leaders. Only in Ireland, however, was this view retained by older pupils.

On average only 66 per cent thought Communists should have equal rights, although this was much higher in Italy (78.3 per cent) and the Netherlands (79.4 per cent). Most anti-Communists were pupils in the United States, Israel, New Zealand and Ireland, where between more than a half and one-third favoured fewer rights. Among older pupils an average 78 per cent favoured equality.

Civic Education in Ten Countries, by Professor Judith Torney, Dr A. N. Oppenheim and Professor Russell G. Arnheim, published by Almqvist and Wiksell International (Stockholm) and John Wiley and Sons. 341 pages.

Denmark rated international issues more highly than average and in the United States democratic ideology was seen as the most important aspect.

Dutch 14 year olds scored the highest average mark in the knowledge tests (58 per cent) followed by German (55), Israeli (54), American (53), New Zealand and Finnish pupils (both 52 per cent). The lowest scores were those of Italian (49) and Irish (44) pupils.

After adjustments for differing degrees of selectivity among the pre-university groups scores for the top 9 per cent of pupils in various countries were: Sweden (74 per cent), the United States (73), Finland and New Zealand (65), the Netherlands (60) and Ireland and Federal Germany (59).

More than one in three 14 year olds and one in seven of the pre-university classes failed to select the correct definition of democracy. English-speaking countries, where many pupils thought that it meant rule by experts. Only 35 per cent of Irish and 45 per cent of American 14 year olds made the correct choice of definition.

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Republic of Ireland

More support planned for private sector

from our correspondent

DUBLIN New legislation to govern the Republic's primary and post-primary schools is under active consideration in the Department of Education, according to Mr. Richard Burke, Minister of Education.

Mr. Burke, who was addressing the annual conference of convent secondary school principals and managers, said that the main thrust of such legislation would be to safeguard the position of the grant-aided private secondary schools, most of which are run by religious orders, and to insist that all schools in receipt of public funds should provide religious education.

Mr. Burke said that one of his motives in introducing the legislation—which may well form part of a General Election package—would be "to cope with some of the problems and misunderstandings which have arisen from educational changes".

He was referring, indirectly, to charges by the secondary school authorities that they are being discriminated against financially in favour of the vocational community and comprehensive schools, which are almost completely supported by public funds.

He made it clear, however, that the religious-run schools would continue to operate under some form of financial restriction precisely because of their private character.

The nature of the legislative safeguards he wants to bring in has not yet been disclosed, but Mr. Burke went into rather more detail about the proposed arrangements for religious education. This, he said, would be denominational in character. Schools receiving public funds would provide such denominational religious instruction as the parents wanted, but students would be able to opt out if they had written authorization from their parents.

The right to decide whether the religious instruction being given in any particular school was in accordance with the beliefs and practices of the religious denominations concerned would be a matter for the school itself. In other words, the religious instruction in the school, although paid for by the State, would effectively be supervised by the denominations.

This may create problems for some schools, notably the handful of new comprehensive schools under construction, which have been experimenting with integration of religious education and which have varying approaches to the problems caused by the requests (sometimes from the Catholic Church authorities) for the provision of denominational instruction.

Such an Act would be the first major piece of educational legislation for half a century, and the process of drafting and consultation which will precede its publication may well be slow.

The new curriculum methods of teaching in primary schools have the overwhelming support of the country's primary teachers, according to a survey carried out by the Irish National Teachers' Organisation, the main primary teachers' organization in the Republic.

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COURSES

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20 February—4 March 1977

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30 years on in caning row

Sir,—Arguments against corporal punishment presumably do not need rehearsing in your columns; I imagine no serious educationist now defends its use except on the lowest grounds of expediency, and I take it your readers hardly need reminding that flagellation forms no part of the educational systems of most developed nations. But the comment of Mr Alan Poole, of the NAS, that it was "very presumptuous" for an NUT branch to take a vote on the matter "at this time" (June 25) did make me wonder whether everyone realizes just how long the argument over its abandonment in Britain has been going on.

In preparing our own representations to the DES on the matter we have consulted files of the old Board of Education at the Public Record Office. To take but one example, we find that a doctor's complaint in 1937 through his MP about the practice of caning girls caused the board to seek a joint memorandum on the subject from the NUT and Association of Education Committees.

"Corporal punishment", states the NUT/AEC memo, "is rapidly disappearing from public elementary schools. The corporal punishment of girls by a man teacher is undesirable, but nothing should be done to alter the present position whereby the teacher stands in loco parentis to his pupils."

The latter dictum brings this tart rejoinder in a minute by the board's chief inspector: "I should myself use a stronger word than undesirable. It would, I think, be very difficult to press what is said about the teacher standing in loco parentis... we cannot follow them in suggesting that it is part of normal parental duty, including the father's duty, to beat daughters."

The departmental superior comments that "the beating of daughters whether by their parents or anyone else is going to be of wife beating, once considered a legitimate practice...".

The Parliamentary Secretary's final reply to the doctor's MP states that "while... the board dispute the caning of girls, I am quite clear that... progress in this matter is likely to be made towards its complete extinction through the free and convinced attitude of the teachers themselves than by external prohibition." (Kenneth Lindsay, MP, to Col L. Roper, MP, letter dated January 1938).

The publicity this very matter has had within the last six months has certainly illustrated the gradual nature of that "progress", and in more general terms the "rapid disappearance" of corporal punishment posited by the NUT/AEC memorandum in 1937 is the more remarkable, when 38 years later a proposal by two local NUT branches to phase it out over a two-year period in two isolated areas is an

event of such moment as to merit some 11 columns inches in the country's leading educational journal, and elicits immediate protests from other teaching unions. I hope that interested parties such as the Portia Trust (we are a charity running hotels for battered wives and their children) will not be convicted of malice towards the profession if we suggest that the concept of extinguishing corporal punishment "through the free and convinced attitude of the teachers" has by now had a fair trial.

As you comment in your leader, Mr Mulley has been quick to show his virility in Tameside. Would it be such a disaster if he were to apply the "external prohibition" of beating so consistently enshrined by his predecessors, and thus oblige our teachers to make the shift which teachers in most other civilized countries seem to manage easily enough?

One thing is certain: without some such intervention NUT branches will still be taking votes on the matter (and the NAS be in another 40 years time).

EDWARD T. BAKER,
47a Hillfield Road,
London, N.W.6.

Sir,—The NUT, via its Croydon branch, once more demonstrates its fidelity to the trade union and presiding over the local authority with an ultimatum.

Quite apart from the shallow emotiveness surrounding all debates and discussions regarding corporal punishment, which I have witnessed taken part in (ambiguity intended), I am annoyed by the impudence and presumptuousness of these people.

A large number of teachers, apparently, have discovered that they do not have to resort to the drop in loco parentis—at the drop of a hat in order to maintain respectability and credibility in the classroom. That is fine.

A large number of other teachers, however, have discovered that they do not have to resort to the drop in loco parentis—at the drop of a hat in order to maintain respectability and credibility in the classroom. That is fine.

—whether a majority or not, is not still hold that corporal punishment has an effective and desirable place in the context of disciplinary standards and the maintenance of good order.

Dare I suggest that the two schools of thought can coexist, with no need for the one to intimidate the other?

The more important underlying principle is that we are all working to the fore, respecting the individuals now and the potential adults they will soon be, with all

NICHOLAS PIZEY,
Brant Court,
Stevenage, Herts.

Secret powers of a headmaster

Sir,—V. H. Crellin ("Ealing Comedy", June 25) says that new entrants to the teaching profession should be warned of the folly of taking up a first appointment with an education authority which does not allow headmasters to provide confidential references. I do not share his views.

The teachers of Ealing are fortunate in having a reason, beyond their control, for refusing to supply the name of their headmaster as a referee to authorities who require it on their application forms (Gwent was thinking of the last paragraph is one such authority), or to those heads, like Mr Crellin, who expect their teachers to make the shift which teachers in most other civilized countries seem to manage easily enough?

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or other and by doing so thwart the promotion chances of a teacher and delay an improvement in the living standard of his or her family?

I have asked the question but I know the answer. I have been told by a head that he received a reference from another head which was designed to damn the chances of the teacher making a move for a new post because he was doing too good a job where he was. This cannot be an isolated case.

By being extremely charitable one could argue that the head supplying the reference in the last paragraph is one such authority, or to those heads, like Mr Crellin, who expect their teachers to make the shift which teachers in most other civilized countries seem to manage easily enough?

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between heads or others in the merits or otherwise of the dates for posts in teaching are discussed. In some ways the situation is often to apply for a confidential reference.

It might be argued that the teacher was given free access to confidential references about his little more than a testimonial, sumably this because he would feel inhibited in some way that he should not do so but can it be that there are in writing a critical comment on them might be called on to justify it? And if they cannot justify a critical comment, should be allowed to make it without possibility of being challenged?

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It's hell getting in...

I most heartily sympathize. My correspondents Messrs. Elliott and Elliott (June 25), point out how frustrating and time-consuming it is to apply for a post as a teacher.

Most cases a curriculum vitae sent up by a letter of application and more useful information than would usually be left to leave until the successful candidate has been chosen.

Mr Elliott describes his four-hour wait in a secretary's office—an all too typical procedure which may be appropriate in the days of a teacher turnover was high and that interviewing it could make sure of grabbing a candidate they wanted before he went home to think things over, which has very little nowadays.

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47a Hillfield Road,
London, N.W.6.

Sir,—The NUT, via its Croydon branch, once more demonstrates its fidelity to the trade union and presiding over the local authority with an ultimatum.

Quite apart from the shallow emotiveness surrounding all debates and discussions regarding corporal punishment, which I have witnessed taken part in (ambiguity intended), I am annoyed by the impudence and presumptuousness of these people.

A large number of teachers, apparently, have discovered that they do not have to resort to the drop in loco parentis—at the drop of a hat in order to maintain respectability and credibility in the classroom. That is fine.

A large number of other teachers, however, have discovered that they do not have to resort to the drop in loco parentis—at the drop of a hat in order to maintain respectability and credibility in the classroom. That is fine.

—whether a majority or not, is not still hold that corporal punishment has an effective and desirable place in the context of disciplinary standards and the maintenance of good order.

Dare I suggest that the two schools of thought can coexist, with no need for the one to intimidate the other?

The more important underlying principle is that we are all working to the fore, respecting the individuals now and the potential adults they will soon be, with all

NICHOLAS PIZEY,
Brant Court,
Stevenage, Herts.

est. References need careful choice: a best friend or colleague may do you a disservice in their enthusiasm and I am not impressed by names-dropping since such people rarely provide helpful information. After all the main purpose behind the exercise is to obtain a teacher who is likely to display expertise and fit into the existing staff.

Whenever possible I do tell my unsolicited candidates the points which first tipped the scales, but the attitude of some teachers upon rejection can cause embarrassment for all concerned.

It is time that forms were discarded. I have always found a particular letter with a duplicated curriculum vitae far more satisfactory. Using this means that only the successful candidate needs to fill in the basic facts required for official records.

D. W. SWAINSON,
Anstford School,
Canford, Dorset.

Sir,—May I, through your columns, ask head teachers and education officers to always state if they have any particular requirements in advertisements for posts as deputy heads? I am thinking particularly of posts where a specific age-range is to be taught.

On several occasions in recent months I have sent for application forms for deputy headships of fairly large primary schools, in groups 4 or 5, to find that an infant teacher is required, or that either infant or primary experience is essential. I would not qualify for such a post. Sending for such forms is a waste of time and stationary and, at 17p return postage, a waste of money.

No doubt the reverse also happens and infant teachers send for application forms for deputy headships which turn out to require upper junior teachers.

I realize that many advertisements for deputy headships or similar specific requirements in age range to be taught, or special skills needed, but I am sure that many would-be applicants would be grateful if this happened in all the appropriate cases.

DOUGLAS GREEN,
School Cottage,
West Alvington,
Kingsbridge, Devon.

Sir,—I used with sympathy the plea of unsuccessful applicants by Messrs. Russell and Elliott (June 25). Having suffered the same frustration and disillusionment at several points I offer some advice based on my own expectations from applicants.

I tend to discard applications which give the barest details with a covering letter, and those which display a poor command of English. A specimen letter is provided to a post's writer, one, but I like to see a post's writer's handwriting since it reveals character and information. I receive far too many forms which indicate neither the applicant's post being applied for, which may suggest a lack of interest.

It is difficult to sound enthusiastic after 20 or 30 applications, but I always take notice of sincere letters.

to sink or swim, we need more systematic and constructive help from I.e.a. officers in charge of probationary teachers. Probably most new teachers see their probationary officers once or twice in the whole year.

With fewer probationary teachers because of the current cutbacks, it would be an opportune time for these officers to give them more time and help. They could offer suggestions for dealing with discipline problems, ways of organizing the day in order to have more time for seeing children individually, as well as lesson planning and the myriad of classroom details. All this is learnt the hard way, but couldn't we make the initiation of our new teachers less of an ordeal by fire, after all, when a teacher is floundering what is happening to his pupils?

DOROTHY LUCAS,
70 Frances Road,
Windsor, Berkshire.

Sir,—I don't fail, is it? We have a management system of 16 schools, originally designed as a non-examinational, for students who were not expected to obtain O levels, but who had other potential objectives without trained personnel and continuing attendance.

MARY E. FRANKLIN,
Assistant Dean,
School of Professional Studies,
Bulmerside College of Education,
(On behalf of a group of teachers from Berkshire, Buckinghamshire, Hampshire, and Wiltshire.)

How unfair, that the outstanding abilities of these children should be lost to the system because of high standards. Now that the grant has been abolished, and most of these schools have gone independent, it is only the children of those who can pay, who will benefit. The less well off, more intelligent children now must all go to the comprehensive schools. Much unfair.

It is plain to see that it is right, where different standards exist, to abolish what is best. Otherwise, it isn't fair, is it?

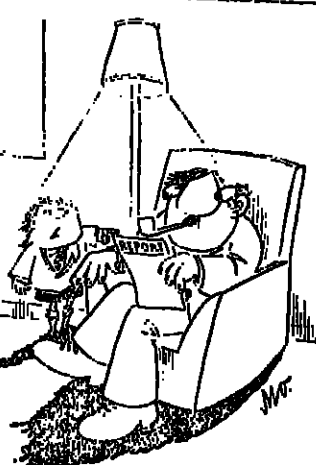
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"I've accepted a 30 per cent reduction in marks to help the nation's economy drive."

Bring back foreign languages

Sir,—We deplore the current trend in educational policy whereby modern languages are losing their place in the curriculum. Modern languages are already seriously undervalued in our schools, where they should have an equal place with other major subjects such as English, maths and science, to ensure that every child has the opportunity to learn a foreign language.

It cannot be too often emphasized that learning a foreign language contributes in a large measure to opening up frontiers, breaking down barriers, counteracting prejudice and, above all, teaching tolerance.

There will always be a need for trained linguists at a high level as translators and for certain scientific and technological jobs, and the need for these experts must be met in the secondary schools. We should also like to see all students of science encouraged to learn a foreign language.

As members of the EEC it is presumptuous of us to assume that we are the only West European country which does not need to learn a foreign language, particularly at a time when we face a desperate economic need to sell our goods abroad. (Surely one of the reasons for our present economic crisis is our inability to compete on equal terms abroad with those nations who take foreign language learning much more seriously?) There are now job opportunities in Europe which would be available to some of our unemployed if they had some degree of competence in a foreign language.

Language learning can give considerable pleasure to the child who enjoys manipulating words and to the person who goes abroad on holiday and is able to make real contact with the natives of that country by conversing with them in their own language. Similarly, it is much more convenient for the traveller to waste time and energy on futile gestures or repeating himself in English, causing frustration all round.

In order to produce linguists who are fluent in a variety of languages, we would suggest the following ways of including a number of languages in the curriculum:

Schools in a given area should offer different languages as their first modern language. This would allow for the teaching of Italian, Russian and Spanish, as well as French and German or, perhaps in areas with a large immigrant population, of other recognized world languages.

In large schools, different languages should be taught from the first year, to ensure a supply of pupils who would eventually carry the study of a variety of languages to A level and also to meet specialist and local needs.

Therefore, we urge curriculum planners to abandon the present short-sighted policy and to give serious thought to increasing, rather than decreasing, the amount of time allowed for foreign language study in our schools.

D. J. DEVEREUX,
J. FAIRBELL,
J. M. PREST,
Heads of modern language departments.

IQ correlation that counts

Sir,—There is little in the reporting of educational research as ridiculous as the remarks made about so-called "gifted" children. As I understand it, psychometricians, as entitled as any specialists to coin their own jargon, use "gifted" to denote children with high IQ, IQ being a quantity whose chief merit is that it is rather easily measured. It is also moderately well repeatable and has some, rather shaky, correlation with various other measures of human achievement.

This limited strength of correlation is not surprising for the enormous variety of human attributes permits of few, if any, really strong correlations, and any attempt to arrange human beings on a linear

scale of wide significance is doomed to failure. I have little doubt that within a limited and highly circumscribed context IQ is not a useless quantity.

However, when the jargon is so misapplied as in a headline "Gifted pupils hide their talents in primary schools" there is bound to be trouble. Surely the appropriate headline for Mrs Palmer's research is "Correlation between IQ and school performance even weaker at upper than average levels".

HERMANN BONDI,
East House,
Buckland Corner,
Reigate Heath, Surrey.

Sir,—Lord James (June 25) must not be allowed to get away with his idiotic remarks on the "terribly serious" on philosophy and sociology in the colleges" which, in his view, apparently, "still go on because of the vested interest and the academic approach that had been fostered on the colleges by the A.T.O.s."

I have recently acted as external examiner specifically in philosophy of education for the B.Ed. degree of a Midlands university (not Leicester); furthermore, I am not drawn on more than 20 years continuous experience as an external examiner in colleges of education. When I compare in my own mind the calibre of the work done for this degree with that produced of old by even the best certificate students, I can only be astonished at the extraordinary superiority in sheer intellectual quality demonstrated in the most specific and concrete terms by the BEd scripts and dissertations. I believe I am not notorious for my optimism concerning many aspects of the current educational scene; here, however, standards have risen out of all recognition.

I am aware that his lordship resents the charge of anti-intellectualism; I will, therefore, charitably regard his current outburst as the result of ignorance rather than as a manifestation of positive satirpathy to the use of mind.

G. H. BANTOCK,
Emeritus professor of education,
Leicester University.

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Advances in philosophy

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In brief

How to get a place

To help sixth-formers to improve their chances of getting a university place, the Assistant Masters' Association have published a second edition of their booklet *Selection for Admission to a University*. The booklet, which has been revised and contains new material, is available from AMA headquarters (60p post free).

Traders prepare

At least 40 colleges and polytechnics are to offer the new foundation course in overseas trade from September. The year-long part-time course, which is supported by the British Overseas Trade Board, is intended as a first step towards obtaining a professional qualification.

Training register

The Training Services Agency would welcome contributions from researchers for inclusion in the latest edition of the *Training Research Register*, which is to be published at the end of the year.

Management

Colleges whose courses have been approved by the British Institute of Management or the Scottish Joint Committee for the award of the Diploma in Management Studies are listed in the Institute's *Management Information Sheet No. 7*. Information from the Committee for the Diploma in Management Studies, The Department of Education and Science, Elizabeth House, 39 York Road, London SE1 7PH, or The Scottish Education Department, 8 George Street, Edinburgh EH2 3PF.

Topped out

An Edm building, key to expansion of the medical and dental schools now taking shape at the southern end of Leeds University's precinct, was topped out by Professor Derek Wood, dean of medicine, last week. The schools will take up to 216 students a year.

Social work

The Council for National Academic Awards has given the go-ahead for a new degree in social policy and administration to begin at Plymouth.

People

Professor H. J. Dyos, professor of urban history, Leicester University, is to be chairman of the Victorian Society, in succession to Sir Nikolaus Pevsner who is retiring after 13 years as chairman. Dr R. M. Davies, reader in mechanical engineering at University College, London, has been appointed director of the Biomechanical Research and Development Unit, of the Department of Health and Social Security.

Schools

Mrs Diane MacKinnon, deputy head of Northwood Infants School, Clapton, to be head of Belleville Infants School, Battersea, South London. Mr John Long, principal of the High School of the Community School Foundation, Teheran, to be director of the Balearic Inter-

Polytechnic in September. Students will be offered a choice of a three-year course leading to a BA honours degree in social policy and administration or a four-year course leading to an honours degree and the Certificate of Qualification in Social Work.

Girls in

Fromington College, in Suffolk, is to admit day girls from September next year.

Fourth year builders

Fifteen fourth year pupils from Derham Boys' School, Norfolk, have been building an adventure playground on a near by developing estate as a community service project.

Hero remembered

The Ross McWhirter Memorial Foundation have given £500 to the Governors of Sherwood School, Welwyn Garden City, to be used to make awards to commemorate the courage, initiative, and leadership demonstrated by Mr John Clements, the young teacher who died with two pupils in the hotel fire at the ski resort of Sappada, Italy, in April.

Ready to help

A list of universities and polytechnics whose careers services are willing to advise graduates or discontinue students other than their own is being circulated for distribution by the Standing Conference of Careers Service in Higher Education (SCUAS).

Farewell-and hail

Former students—and their husbands or wives—are expected to turn up tomorrow for a "rising-from-the-dead" garden party at Kingston upon Hull College of Education which is to become part of Hull College of Higher Education in September.

Chess tournament

Entries for The Sunday Times national schools chess tournament, which is run in association with the British Chess Federation, is for teams of six and is on a knock-out basis, with age handicap. Entry forms from the Federation, 4 The Close, Norwich NR1 4DH.

National School, San Agustín, Palma de Mallorca. Mr M. R. Bonford, of Wellington College, to be head of Haberdashers' Monmouth School, in succession to Mr R. F. Glover, who is retiring.

Universities

Dr Robin J. Cole, reader in developmental studies, Sussex University, to a chair in developmental studies at the university.

Dr G. E. Adams, director of the Cancer Research Campaign, Grays Laboratory, to the chair of physics as applied to medicine, Chelsea College, London University.

Professor P. J. Black, professor of physics (science education), Birmingham University, to the chair of science education, Chelsea College, London University.

Professor S. F. Fish, professor of prosthetic dentistry at the London Hospital Medical College, London University, to the chair of prosthetic dentistry at the college.

Sport

Encrusted in gold

by Stanley Levenson

The English Schools' Gymnastics Association team has returned from Orleans, France, encrusted in gold, silver and bronze. Competing against teams from more than 30 countries in the World School Games, the squad gained the girls' team championship, came second in the boys section and also collected two individual golds, two of silver and three of bronze.

The successful girls were Lisa Jackson (Blackfen School, Sidcup, Kent); Karen Robb (Colne Valley High School, Tuddersfield); Carolyn Illingworth (Astley Grammar School, Dukinfield, Cheshire); and Joanna Sime (King Edward VII School, Sheffield).

Lisa also won the asymmetric bars title in which Karen took the bronze. Karen collected two more medals, a silver for floor exercises and a bronze for overall third place, a complete set. A bronze medal, too, for Joanna on the beam.

The boy silver medalists were: Chris Smith (Springhead School, Northfleet, Kent); Peter Collins (Baldon Comprehensive School, Tyne and Wear); Peter Blatch (Southampton); and Martyn Ellis (Rokely School, London).

Peter Blatch also won a gold medal for the vault, and Peter Collins a silver for floor exercises.

Liza Jackson and Chris Smith go to Moscow next month for special training. They and their six compatriots formed the most successful team ever to take part in a world championship event.



Table tennis en masse.

Helping hand for the young at Olympia

Christian Schiller; Connie Rosen; school councils

Coaching and training sessions for young people are being held at the Olympia Games exhibition. It runs until August 10. The exhibition is intended to give young people a taste of the Olympic spirit and to encourage them to take part in sport. The range of equipment is extensive and the standard high. There are three tennis courts of international standard, 20 table tennis tables, a badminton court, a golf simulator (an electrically operated simulation of the Lobo course, in Portugal), a physical fitness programme (provided), two bowling machines and two play areas for the very young.

Six coaches are on hand to guide beginners and to help efficient players with additional tips to develop their skills. Besides encouraging those acquainted with one or another of the games may wish to try them, the exhibition is open to Mr Denis Howell, Minister of Sport and Recreation, opened the exhibition, gave an introduction for some sports so far untried. Admission costs 20p (children 10p). An hour on the exhibition court costs £1. The exhibition is open to the public from 10.30 to 5.30 p.m. to play bowls for an hour.

Anglo-French get-together

A rare Anglo-French venture in physical education is to take place at the Crystal Palace Centre, London, on September 6 to 10. Arranged by the Physical Education Association in collaboration with the French Government's Committee for Youth and Sport its theme is the place of sport in education.

The idea is that British experts will speak to the French participants about experiences in Britain while a French physical educationist will address a British group. Then both groups will come together to discuss the topic.

Themes and British speakers will be: structure and organization of physical education and sport in schools (Miss J. M. McLaren, ILEA); physical education in the home (Mr J. M. McLaren, ILEA); organization of school sport (Mr Dick Burdon, secretary of the National Council for School Sports); the place of sport in training of physical education teachers (Mr R. J. Fisher, head of the Physical Education Department, Epsom College); and sport in the home (Mr J. M. McLaren, ILEA).

Boys and girls at speed

More than 100 boys and a smattering of girls will zoom round the 750-yard track at Rye House Stadium, Huddersdon, Herts, tomorrow during the fifth annual championships of the National Schools' Karting Association.

This is one of the occasions for trying out karts made in school technology departments. Indeed, the emphasis this year is on building chassis, says Mr Keith Broadhead, who is the NKSKA secretary.

In five of the six categories of racing the chassis must have been made in school technology departments and those made elsewhere will be permitted. Apart from the race winners, there will be awards for the best designed and best constructed karts.

It is this two-sided appeal, knowing that it gives an aspect of technology to the school, and that it is a challenge to the school, which has been the success of the karting competition.

School, Melton Mowbray; Hornsey School for Girls, London; Willey Abbey Comprehensive, Coventry; and Plymstock Comprehensive, Devon.

At the Royal Tournament each school will demonstrate what they normally do in physical education and the four parts will be made into a whole by Connie Barrett, secretary of the PEA. The PEA is a charity which aims to improve physical education in schools. It is a charity which aims to improve physical education in schools. It is a charity which aims to improve physical education in schools.

But for the PEA, the improvement made by the schools in the year campaign is the feedback into the profession and into schools. The PEA is a charity which aims to improve physical education in schools. It is a charity which aims to improve physical education in schools. It is a charity which aims to improve physical education in schools.

Look and see

A self-instructional microteaching course, which represents an attempt to extend service training, is now being used in a number of higher education institutions. So far the publications and videotapes have been bought or hired by seventeen colleges, five polytechnics and universities, and three local education authorities. Next year the city of Liverpool will use the course, *Effective Questioning*, and a similar package *Planning Independent Studies* as part of their pilot scheme for the induction of teachers.

The courses have been developed by the Microteaching Research Unit at Lancaster University, which is directed by Professor Elizabeth Perrott. Funded by the Department of Education and Science and the Organization for Economic Co-operation and Development, they are seen as a way of changing teachers' classroom skills.

Microteaching is broadly the breaking-down of teaching into separate skills which are practised by the teacher for short periods (about 10 minutes) with small groups of children. The teacher's performance is usually, but not always, assessed by viewing a videotape of each lesson in which a specific skill is practised, and must be evaluated according to the teacher's own performance.

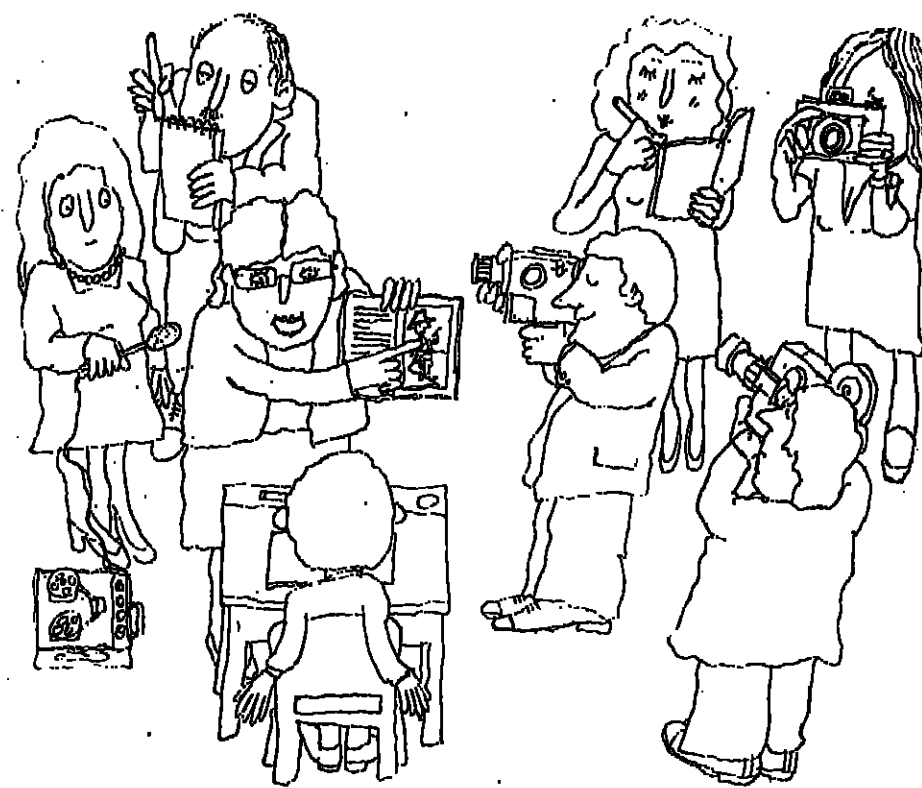
The cost, including say a control's basket, will be £10 a head. A follow-up in France next year is under consideration. All this seems to fit well with the concept of closer co-operation between the two countries, urged by the President during his state visit last week.

Although microteaching is often associated with video equipment, a record can also be kept with the aid of an audio-recorder or even pen or pencil. Video recording, however, allows the teacher to watch visual faults as well.

The use of microteaching in education colleges and other higher education institutions has grown steadily over the last few years, in spite of some criticism and controversy. This centres mainly round its psychological and educational assumptions and tends to emphasize the mechanical elements. Critics often associate microteaching with unpoplar rote learning and Skinnerian techniques, while milder objectors, conceding that it does have a role, doubt whether it can live up to the larger claims made for it.

Critics also dispute whether it is too widely used and suggest that even if this is done, it is almost impossible to integrate such a course into a total teaching style. Specific skills, they claim, does not put enough emphasis on the child in education, and the correctness and usefulness of skills it teaches are insufficient.

In spite of these reservations, most would agree that it does have a role to play in training, though the extent and quality of its use is hard to determine. Elizabeth Perrott's publications, *Effective Questioning*, is already published, and the second, *Planning Independent Studies*, will be published soon. Both packages are designed for use with in-service teachers, and though they have been tested with trainee teachers, results have always proved better with those who were able to practise during and immediately after the course.



Carolyn O'Grady reports on some growth points in the use of microteaching techniques

worked with the American Biological Science Curriculum Study. The ideas evolved there she applied first at Keele University, auditing in the classroom, and later at Stirling University. However, during this time she moved away from most of the dogmas of microteaching in her attitude to one crucial point: the role of the supervisor. In most microteaching courses the teacher's performance as shown on the video or audiotape or in notes is analysed by a supervisor who also advises the teacher and sets up the equipment. All these functions, argues Professor Perrott, can be performed better by the teacher himself.

Meanwhile at the Far West Laboratory, San Francisco, a self-instructional microteaching course was being developed by Professor Walter Borg, then working on similar lines. This course consisted of videotaped sequences illustrating model behaviour and common faults, and manuals. These microcourses, as they are called, are the basis of the present project. American research—subsequently borne out by English research—suggested that they improved basic teaching skills; encouraged teachers to diagnose their teaching ability; reduced the amount of time during which the teacher talked; and increased pupil involvement.

In 1972 Professor Perrott was commissioned by the DES to adapt materials for use in in-service teacher training. A parallel brief came from the OECD who are interested in the transfer of learning materials from one culture to another. They argue it is economically desirable to make as wide use of tested and validated educational systems as possible. The result has been two self-instructional microteaching courses: the first, *Effective Questioning*, is already published, and the second, *Planning Independent Studies*, will be published soon.

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Effective Questioning was chosen as a subject, says Elizabeth Perrott, because "it is absolutely basic to any form of teaching", while *Planning Independent Studies* was given high priority by the DES in response to what is seen as a lack of training—both in-service and pre-service—in this area.

In the course, effective questioning is divided into 12 skills, including redirecting the same question to several pupils, prompting, handling incorrect responses, calling on non-volunteers, seeking clarification, refocusing and treating incorrect responses in an accepting manner. Each of these is practised separately, or occasionally in twos and threes.

The teacher watches an introductory videotape and also reads the handbook. He then prepares a "micro-lesson", to be conducted with a group of children, and videotaped. For this the student can come to the Lancaster microteaching centre, but most of the colleges using the programme now organise their own sessions. Videotaped model lessons are also included in the package, which along with the evaluation manual establish criteria against which teachers can measure their performance.

On the day I visited the centre, teachers attending the unit as part of the course were on the whole well pleased with their progress. They felt that their use of the skills was improving, and had no doubts about their usefulness. One of the main criticisms levelled at the package—apart from the price, which is also often mentioned—was that the situations portrayed in the ready-made videotaped sequences were artificial. They are obviously rehearsed and the children "play the parts" of intelligent, forthcoming pupils, perhaps reinforcing an outsider's impression that microteaching has little to do with real classrooms and real children.

Professor Perrott agrees they are artificial. What is being shown, she says, is not a proper lesson, but a model illustrating one small skill in isolation—in the teachers' own microteaching lessons, the children will be much less forthcoming.

But she strongly denies that this artificiality means that the skills have no relevance to teaching in schools, or that those specific skills can be integrated into a teaching style.

Research suggested that teachers used the skills practised much more after completing the self-instructional microteaching course than before. For example, they did not repeat their own questions or the pupils' answers so many times; they did not wait longer for answers; they talked less during discussions; sought clarification more often; and called on non-volunteers. Perhaps most interesting, as it is the only question which reflects the attitude of the pupils, is that the quality of the answers—based on the level of thinking evident in each pupil's response—and pupils' discussion skills appear to improve.

The course, says Professor Perrott, produces some self-consciousness at first, which makes it difficult for teachers to use the skills practised intelligently in their real lessons. They frequently use the skills too often. Later, however, she maintains they are integrated into a teacher's repertoire of skills. "When you have a new bike you ride it all the time, but it soon balances out."

Planning Independent Studies, the course which is newly completed, takes as its starting point the fact that teachers are insufficiently trained to organize independent studies effectively in the classroom. Unlike *Effective Questioning*, the course is not broken down into skills, but into five instructional sequences: the assessment of pupils' levels of independence in planning independent studies; helping the pupil to specify learning objectives for an independent study; helping the pupil to identify available resources and to specify learning steps; establishing checkpoints to provide pupils with feedback on the progress of their work; and setting deadlines for the pupil's work. The final unit looks at the complete work plan.

This package, which will be finished in October, will be used in Liverpool as part of the pilot scheme for the induction of teachers. Professor Perrott's unit will then begin to evaluate the Liverpool work with a view to comparing the results with those from in-service teachers. The unit also plans a follow-up of teachers now using the *Effective Questioning* course. They are particularly interested to see how they use the skills taught in the course with a new class, as so far most have gone back to the same class they were teaching before the course. It is hoped that a longer-term survey of this sort may provide more substantial information about the true worth of microteaching, as a way of getting the teacher to review his or her interactions with the children.

Effective Questioning—A Self-Instructional Microteaching Course for In-Service and Trainee Teachers is available from Guild, Sound and Vision. The five videotapes and three books cost £510.

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Rigour and inspiration

Sir Alec Clegg assesses the work and influence of Christian Schiller, who died earlier this year.

I still think Christian Schiller may be rated by history as the most powerful influence to be exerted on the junior schools of Britain after the First World War. But two facts may prevent this: he sought hard to avoid publicity and he disliked lecturing. Relatively little of his wisdom has appeared in print.

This is to be deplored. He saw and experienced an immense range of change. In his time the old nineteenth-century grouping of pupils by attainment disappeared. On this his comment was "as the rigidly relaxed and age grouping emerged, there was the age-old cry that we were destroying standards".

He saw the Hadow reforms which established the new Modern schools; he welcomed and, indeed, promoted much of the transformation which took place in our junior schools; he lived on to fear that this step forward might be damaged by the creation of middle schools; he saw the first comprehensive secondary schools and deplored their size.

Schiller became one of his Majesty's Inspectors in the twenties. He worked for many years in the urban area of Liverpool and one of the things which made him think of abandoning his job was the stonch of the children in the classrooms of those days. He would mention this scathingly in discussions on "then" and "now", especially when there was talk of deterioration.

He was a Cambridge mathematician, but his insight into the function of the arts in the education of the primary school child was as profound as any I have met with.

He saw problems clearly. One example of this is to be seen in a statement on secondary school selection set out with great lucidity. As he put it: "To expect boys and girls who pass at a set time each year into secondary schools to line up level along a tape in respect of any characteristic or attainment is to be blind to the way the Creator has chosen to make our world."

"If a minimum of attainments is fixed such that it is within the power of all, it is demonstrably irrelevant to the vast majority and of no practical value. If a minimum is fixed such that some only can reach it, it must demonstrably be beyond the powers of the rest and its imposition will undoubtedly lead to a distortion of their powers. In my view the

goal of a minimum of attainment is incompatible with continuity in the process of learning."

He refused to see education as the fragmentation of learning, rather did he insist on seeing it as the process of growth of a whole individual. To him the way of learning which consisted of knowing by parts was the way of the grammarian and the scientist, but he declared there was also a way of learning and knowing by wholes, and this was the way of the poet and painter. "Reasoning is but one of the instruments of the mind, imagination is another and it is no less powerful. When imagination guides reasoning," he said, "curiosity becomes courageous."

His faith in the expressive arts was great. "The longer I live the more I am impressed by the potential of ordinary young human beings and by the extent of our failure to help their powers to grow. But frustrated and inhibited, the powers still survive and from time to time they break through in spontaneous expression in drama or painting or poetry, or most often in speech."

It is well for us to remember that comments of this kind were made by a man in his own words, "was brought up in mathematics and at a time when rigour was all, and the *Principia Mathematica* mathematics is that it creates and explores a world of perfection where rigour and the other world is still and lifeless and this other includes everything of beauty and feeling which we enjoy."

He never entirely left teaching. When he was an HMI he ran remarkable courses in the refreshment of teachers in Worcester and later, when he had been a schoolmaster, he ran regional and national courses which had a profound effect on the development of junior schools in the about postwar years. There was no doubt the rigour and discipline of these courses; silence greeted the latecomer, elevated of visitors found this daunting. After he retired from the Inspectorate he spent many years as a member of staff in the London Institute. Those who worked with him in their years as students conceived a great affection for him and a profound respect for his wisdom.

"He really possessed all the attributes of the best of teachers and he applied them equally to us all. He knew us all as individuals and helped us as such. He taught all the time bringing us back to the children and how they learn. 'Watch children' he said, 'and they will show you what you need to do to help them.' If we do our tasks well some part of Christian Schiller will go into what we teach, and that is immortality."

He was interested in the so-called "progressive" independent schools and had a warm appreciation of what Leonard Elmhurst did at Dartington. But he held that the impact of such schools on the state system was slight. As he put it: "What the progressive schools and new and strange ideas (often in easy circumstances) and show that they were not burned up by an avenging deity. At no time then or now did the progressive schools show how things might be carried out in the state schools along their lines. Usually they had not the slightest interest in the state schools."

Schiller believed that it was Robert Owen (whom he described as a wonderful man who married the wrong woman) who inspired the infant schools of the twenties, and it was these schools which in his view led the way.

Until his death at the age of 80 he was fully alive to the educational problems of our boarding schools. "Many boys and girls have the need of a home available in each 24 hours," was how he put it. But secondary school should be a base from which they would go out into the wider world, and to this end he welcomed state boarding secondary schools, particularly at the sixth-form stage.

Long before the Lancaster report, he was critical of some of the recent trends in our primary schools. "For example, it is in many infant and junior schools; the children squeeze paint, flick paint, scratch paint, smear paint, but never paint." He deplored a too blatant recourse to appropriate and hardware, and said: "A little alighting by some authorities in the matter of expensive equipment and furniture would be no bad thing. The

real trouble is that we have become so materially minded."

But he took such matters philosophically. I remember once expostulating him on the vast amount of apparatus that was coming into our schools. He said: "Never mind, my dear Clegg, will all find its way to the back of the cupboard." He was much more profoundly concerned by what he referred to as the rigid educational theories which he believed now to be invading our classrooms, as a result of the overvaluation of the academic.

To me one of his most engaging characteristics was the vigour with which he expressed himself if he thought inefficiency and incompetence were making ground. Few will have known him well enough to assess him as an administrator, but he could be vehement in administration was inefficient or inadequate. When he was an HMI in Liverpool, he was convinced that the Act was not meeting its obligations under the Act, and the Minister, Lord Hailsham, imposed a fine on the city.

It would be wrong to close our eyes to his unobtrusive but engaging sense of humour. This telephone conversation in the early 'forties was typical. Schiller: "Clegg, we've just opened the new dining room in Stourbridge; it went off splendidly. We had stew followed by prunes and custard."

Clegg: "Really? And every child is so overjoyed according to the head's instructions. There wasn't a single prune stone left and one little boy who looks like a prune stone had his eaten by the neighbourhood. Now wasn't that a kind gesture?"

Clegg: "Well, what had we better do?" Schiller: "I suggest you tell your medical officer, but we know what he will say." Clegg: "What?" Schiller: "Wait and see."

And he did, and nothing happened. Sir Alec Clegg was formerly chief education officer in the West Riding of Yorkshire. This article is based on a talk to Christian Schiller's life, to be held at Goldsmiths' College, London.

Christopher Orr

A teacher's teacher

Leonard Marsh recalls the contribution of Connie Rosen to teachers' understanding of language development

The many teachers who knew Connie Rosen will have been saddened by her death in May. When our education service is threatened by a paralysis that comes from a sense of gloom, we would all have gained strength from her sense of impatience with difficulties and constant struggle to hurry forwards.

My earliest recollection of Connie Rosen was visiting her in her classroom in a newly opened junior school in Hertfordshire. Her classroom always seemed to me to be in the midst of a never ending language or talk sit-in. She was working with older juniors, and there was a directness about her approach that brought about a sharp concentration upon language development and an enthusiastic acceptance of the value of talk.

Words, phrases were exchanged, descriptions enlarged and analysed, and references to a widening range of books were incorporated in what can be best described as a seminar. It was easy to see why her experiences with Christian Schiller when she was a student of his Institute course, as well as parallels with the activities of Margaret

Spencer, Nancy Martin, Jimmy Britton and, of course, her husband, Harold, who were working as a team with students on the postgraduate course at the Institute.

Both her children and her colleagues accepted her impatience as an essential ingredient in her propelling force to develop in those she taught a power to use language in an intellectually brisk and purposeful way. She was always generous with her time when colleague or child entered into a conspiracy with her to enjoy their developing powers of language competence. Adjacent to Connie's classroom in Hertfordshire was a young teacher by the name of Maryn Richards. He, and many others, are conscious of the generous sharing and

help they received from Connie.

There are many teachers who remember their discussions with Connie over the years. She had an intensity of interest in classroom activity and would catch up her colleagues in discussions of her own work and theirs, so that all felt the seriousness of their own enterprise had been recognized. As director of the Schools Council project, "Language Development in the Primary School", she met many teachers throughout the country. Connie had the satisfaction of feeling that she was both encouraging individuals and making a contribution to the recognition of the teachers' skill and activity in wider academic and research circles.



Angela Williams

Before her Schools Council project she had worked with me at Goldsmiths' College as a tutor in the postgraduate primary department. I was delighted that as a tutor she continued to work with students in the same way that she valued by her colleagues in the department, and during this time established enduring relationships with a number of students and heads of primary schools, who formed a substantial core for her subsequent work with the Schools Council.

All who know her at Goldsmiths' counted her as a friend and distinguished colleague, and it is a matter of sadness that her move to Trent Park (now Middlesex Polytechnic) to start up a course of her own did not become the beginning of a lengthy chapter in her life.

But Connie of all people would have stant respect for those who were unable to use her example as a spur to further effort and continued optimism. Many will remember her with affection and will be encouraged by her strengths to continue with their work. Her own strength came from a closeness to her own classroom work and this—for me—is still best described in her article in *Primary English* (NATE bulletin, vol 3, no 3) and her chapter "Object Lesson" in *Children Using Language* edited by Jones and Mulford. She was an able teacher with the gift of sharing her experience, and all who knew her will have good memories of her partnership with Harold and the happiness she had both in her family and work.

Leonard Marsh is principal of Bishop Grosseteste College, Lincoln.

Learning to decide

Dave Paterson suggests that vandalism and truancy could be combated by the introduction of school councils with effective powers of decision-making



School student protest in 1972: was anything achieved?

What has democracy got to do with schools? This question is one the National Union of School Students frequently confronts, in their attempts to introduce to the present educational system more participation for everyone concerned with a school.

A major trend in educational thinking over the past decade has been the realization that schools are not simply there to get pupils through exams, but that they should be training students to play a full part in society. This can be seen in attempts to integrate the school in the local community, and to introduce subjects such as social or general studies, and topics such as legal rights into the curriculum.

At the same time, there has been a growing recognition in the wider society that one of the major enemies of a democratic society is apathy. Few people have not come across it in one form or another, whether it is rows of empty chairs at a trade union branch meeting, the teacher seeing the drama club on the long slide to oblivion through lack of interest, the community-minded individual watching schemes for improving the neighbourhood collapse through too much work and too few bodies.

If schools are meant to train people for society, and that society is democratic, it follows that schools should train people in democratic procedures and methods. It should not be surprising that so few people take an interest in what goes on about them when most people have, in their formative years, been in an environment which allows them to control over their own lives. Schools must introduce the means whereby students can become used to taking decisions and participating in the general affairs of the school.

The best way of doing this is to introduce a school council system to all schools—not the weak, pathetic talking shops which generously allow school students to choose the colour of the curtains for the common-room windows, and which are all too common today—but genuine councils of students, parents, teachers, non-academic staff and representatives of the local community. The councils must be given effective powers otherwise they cause more boredom, frustration and apathy than if they did not exist.

The three key areas of power within a school are those of curriculum, discipline, and finance. To be effective, the council must control these areas. Many teachers will react strongly to any suggestion that curriculum and discipline be devolved away from those trained to be expert in such matters. But on a school council, the views of parents and pupils could help to

form a more balanced policy, more flexible and adaptable to their needs.

Perhaps the most important questions about such a scheme are "Would it work? Would school students have enough responsibility and knowledge to cope with educational problems?" In one country many of these ideas are already working. In Finland the proposals of the 1971 Koulu-uudistus laki (school council law) have been put into effect. This law provides for an equal number of voting teachers and pupils over the age of 15 on a council, and the same number of non-voting pupils below that age. A council for an average-sized school will consist of four teachers, four voting pupils, and four non-voting pupils. Elections are run on the principle of one person, one vote, with some cross-voting (i.e. for candidates from sections other than the voters) allowed. Candidates can stand on political tickets, and the proportional representation system is used.

Unfortunately, the law as it stands at the moment does not specify representation from parents, the local community or non-academic staff. However, some schools have taken the initiative and invited representatives from each of these groups on to the council, and have found the experiment worth while. And although they suffer from this drawback, the councils have some important powers granted by law. They are consulted on all matters of curriculum, syllabus and teaching materials (finance included), and have the power to deal with all disciplinary matters (subordinate only to the teachers' council—the equivalent of the local branch of a teaching union).

Generally, opinion in the schools is in favour of the councils. They have some difficulties, such as pupils choosing textbooks. However, most councils have found a way round this by taking advice from previous pupils. Other problems come up, but none seem to be insoluble. If such a system is put into operation and people are given responsibility, it is clear that they can use it wisely and effectively. Schools today are heavily affected by a feeling of non-involvement on the part of pupils. As well as benefiting society as a whole, the introduction of the council system may lead to a feeling among pupils that schools are their schools, and that they can change things they don't like constructively, instead of by vandalism and truancy. The councils will not be a cure-all for these problems, but they could provide a glimmer of the answer.

Dave Paterson is president of the National Union of School Students, whose annual conference takes place this weekend at the City University, London.

A product of hard won experience

CHERIDA MARES on a literacy project organisers' pack

The British Association of Settlements Adult Literacy Project give advice and help on effective programmes of tuition. They also encourage cooperation between voluntary and statutory literacy schemes. In response to demand for information on organizing literacy schemes, the association have now produced the BAS Adult Literacy Project Organizers' Pack.

Although tuition for adult illiterates is now available in every local authority, there is considerable variation in the schemes and experience of tutors and organizers. The pack deals with organizing and management difficulties which are only found in literacy schemes set up without any previous experience. It does not deal with teaching techniques or methods.

Written by six experienced organizers, the pack is based on information collected from 100 organizers. Drafts of the actual materials were tried out with more literacy workers. This preparation is obvious throughout in the innumerable small details that are the result of hard won personal experience rather than theory.

The pack consists of six short booklets on resources, structure, publicity, students, tutors and volunteers. The booklet on resources deals admirably with likely differences between local authorities and voluntary agency literacy schemes. These vary from small schemes with little money to ambitious programmes for which adequate funds are available. Obviously not all the information applies in all schemes and comments on organization, whether to buy calculators or furniture, for example, may be frustratingly irrelevant to organizers with limited money. However, details of filing systems, record keeping, budgeting, fund raising and general management are clear and helpful, anticipating many of the difficulties which await the inexperienced organizer.

"Structure" discusses questions

which constantly reappear such as staff/student ratios, division of time, delegation and how decision-making determines and limits future choice and development. The comparative and control of advisory and management committees, the exact function of teaching and other staff and the need for early clarification and definition of their roles are also helpfully examined.

Among topics considered in "Tutors" are the strengths and weaknesses of different teaching methods and the frequency, timing and sifting of the teaching itself. Record keeping, which is briefly touched on, could have been further developed, although the authors may have considered that this comes under teaching methods which the pack does not explore.

It is in the two booklets on students and volunteers that gaps appear. So complex an area can hardly be more than introduced in the space allocated. Though some topics, recruitment, interviewing, selection and assessment, are thoroughly examined, others get less detailed coverage.

Emotional dependence and tutor/student relationships could have been given more room as could the question of "Who trains the trainers?" The fact that there are so few experienced trainers concerns many volunteer tutors attending classes throughout the country. However, I am not criticizing the content of this excellent pack, but the few omissions. The pack makes a real contribution to the literature on adult literacy.

When the pack is reprinted, it could be produced more compactly and less expensively. There seems little need for a 10 x 12 ring binder for six small booklets each measuring 8 x 6.

The pack is available from the BAS Literacy Project, 33 Clapham Road, London SW9. It costs £4.50 including postage.

Oxford offer

Oxford's education office is moving to Goldsmith's College on September 1, so they are having a sale of books, booklets and wallcharts. Everything costs under 25p and some items have been quite drastically reduced - as from 11.25 to 25p. Among the books are *The United Nations*, by Peter Larson, *World of Learning - Learning by Radio*, *East Pakistan in the Wake of the Cyclone and Korea - The Aftermath of War*.

Visitors may find some materials being given away. The offer is open until August 31. People who cannot visit the current Oxford Education Office, at 32 Fildon Road, London SE5, should send a stamped, addressed envelope for a booklet. Orders can then be made by post.

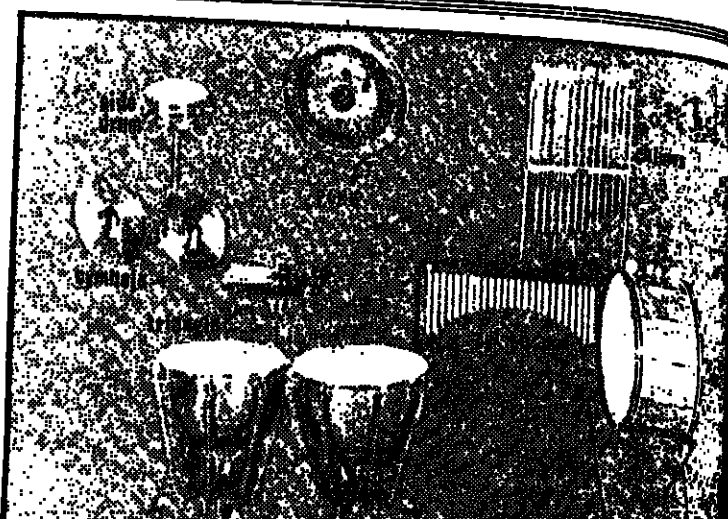
Video exhibition

The first exhibition in Britain devoted exclusively to video equipment will be held at the Heathrow Hotel from November 10 to 13. Sponsored by Video and Audio Visual Review, it will take its title from the "cost-effective colour" theme.

Equipment on display will range from cassette recorders through low-cost monochrome equipment to the most elaborate broadcast colour systems. A three-day conference, held to coincide with the exhibition, aims to provide an understanding of what video is and what it can do.

Video 76 will be open to the public, on Saturday, November 13 (admission free) and to trade representatives on November 10 to 12.

Further information: Video and Audio Visual Review, Link House, Dingwall Avenue, Croydon CR9 2AA.



Left to right: detail from a Bosch painting illustrates "Night on a Bare Mountain". Instruments illustrate "The Young Person's Guide to the Orchestra".

Visual nudge to musical appreciation

by Mavis Teasdale

The Young Person's Guide to the Orchestra, Op 34 Beethoven, MAS 4048 (record) and SE 8056 (strip), £7.00.

Pictures at an Exhibition, Mussorgsky/Ravel, MAS 4022 (2 records) and SE 8005 (strip), £8.30.

Night on a Bare Mountain, Mussorgsky, MAS 4090 (record) and SE 8170 (strip), £7.00.

Poème Electronique and Other Selections, Varèse, MAS 4237 (record) and SE 8314 (strip), £7.00.

EAV Ltd, Butterley Street, Leeds, LS10 1AX.

Music appreciation is by no means the easiest subject to teach because of the difficulty many children have in listening with concentration. Many teachers will welcome, therefore, the refreshing approach of these materials though they must also face the possibility that attention will be diverted wherever the pictures do not focus directly on the music, but lead off on an imaginative plane.

EAV Ltd now produce a Music Appreciation series which spans a wide age range. Each set consists of a record and correlated filmstrip. One side of the record is a Study Version and is designed to be played with the filmstrip. Here the works are performed with a distinctive electronic signal superimposed on the music to indicate when filmstrip frames are to be changed.

Side two is a listening version presenting the same performance without any electronic signal and is designed solely for listening. On

each sleeve there are a few notes on the music and a brief chronological biography.

The Young Person's Guide to the Orchestra by Britten is a work of universal appeal, as well as a first rate starting point for study of the orchestra. It is here presented with a commentary which is clear and interesting, but not intrusive. Pictures of the instruments are interspersed with actual photographs of the instruments in use.

The setting positions are shown in diagrammatic form as the instruments enter in the fugue. It is a pity the concert hall photographs are so dark. Otherwise this is a sound and useful aid.

As the paintings of Mussorgsky's friend Victor Hartmann are no longer well-known EAV has taken the theme and mood of the 10 sections of Pictures at an Exhibition and has attempted to match them to another group of paintings—36 art masterpieces.

Subject to the reservations one may have about this substitution, this selection is inspired and stimulating for teacher and student. The study possibilities are endless, particularly where there is a good library. Learning aside the musical content, the filmstrip would automatically lead to a study of the individual pictures and their painters. A visit to a gallery might produce a further alternative selection of paintings. The strong mood evocation lends itself to discussion and creative writing.

This is an enlarged set consisting of a filmstrip and two records but is a good value and potentially useful. It is likely to be most successful.

Animal magnetism

by M. J. Ostrynska

Our World Wallcharts, Pack 1, Animals, 24 Colour wallcharts, each 49.5 x 37cm. Macmillan Education Ltd, Houndsditch, Basingstoke, Hants. £7.50.

Macmillan Education's series of "Our World" wallchart packs for use in environmental studies and natural history, is a good example of the increasing sophistication teachers and pupils can now expect from wallcharts.

Pack 1, Animals, contains 20 full colour photographs of words and pictures dealing with insects, fish, reptiles, amphibians, birds and mammals, together with four "semantic" charts which are intended to be the starting point for group discussion and other creative work.

The 20 information charts are in groups of four which can fit together to make one single large chart. The charts on birds, their flight, land birds and water birds, these could be mounted together, although each is self-contained. Each group of charts is



From the chart on reptiles.

colour-coded to make for easy recognition. This has positive value for children in helping to recognize the different categories of animal life.

The standard of photography is high—the large pictures which comprise the stimulus charts are particularly striking. The text is also commendable; clearly set out and simply expressed. Although most suitable for middle school students, some of the more detailed

New sounds

are numerous, but widespread, about the deaf and, first, that they live in a world of silence; secondly, that if they wear a hearing aid they are immediately brought into the world of normal

A hearing aid does magnify sound, but it also distorts it and increases certain types of noise, small sound to the normally hearing may become painfully loud through a hearing aid.

This is a particular problem for hearing-impaired children in normal schools; background noise produced by 25 to 30 children when spoken to by a hearing aid, completely drowns the teacher's voice, and means the partially-hearing child has to rely on lip-reading, which is tiring.

A new piece of equipment overcomes the worst of these difficulties, and greatly improves the school life of deaf children. Commonly called a radio-microphone it consists of a microphone—worn by the teacher—and a receiver—worn by the child. These are completely separate. The wearers are independent of each other.

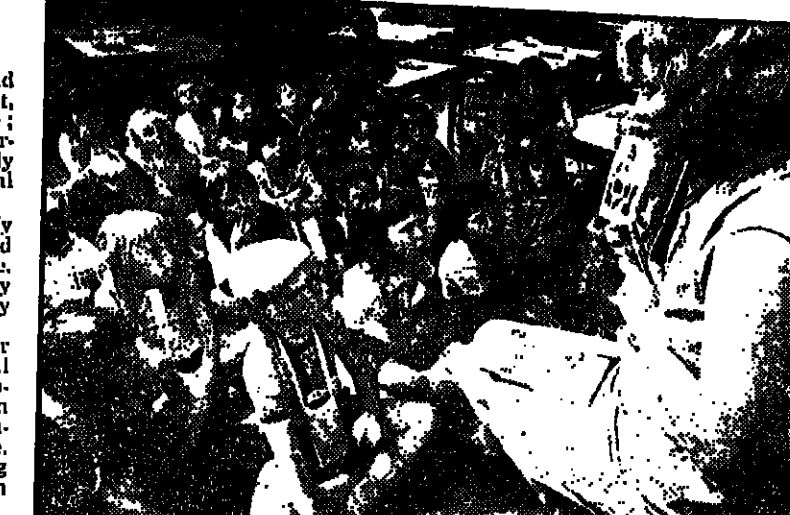
More important, they give the teacher direct contact with the child. Whatever is spoken into the microphone can be heard by the child with the minimum of background interference and loss of the distance between speaker and listener.

This makes it much easier for the child to follow lessons, and also allows the child to participate in school assemblies, for example, in which the teacher's voice is as loud to the child as if he were standing beside him. Normally the whole proceedings would be lost.

In activities such as musical movement the child is free to dance about the room wearing the receiver and, provided the microphone is placed near the player, the music can be heard clearly within a large radius of the piano. This gives an added dimension to the child's school life and stops him feeling "out of things" or different.

In lessons involving television hearing children often prevent the deaf from hearing the programme, but in this system the deaf can follow them. This is particularly when children rarely sit still or

MARY TOMLINSON, whose son is deaf, on an aid which has improved his school life



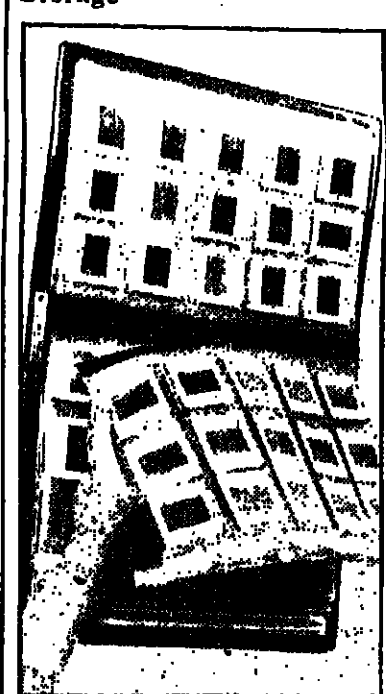
Michael Tomlinson (foreground, centre) communicating through his radio-microphone with teacher, Audrey Atwell at Mountford Manor Infants School, Swindon.

child as if he were standing beside him. Normally the whole proceedings would be lost.

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Storage



The Braines slide library. Slides are stored in double sheets of translucent and clear PVC. Flexible steel wires which are welded into the spine of the double sheets are inserted into the special magazine fitting of the A4 size folder. This quick release system, say the manufacturers, allows the sheets to be extracted without disturbing the others.

Further information on this and other filing systems from: Koryseal Trading Co Ltd, 225 Southway Bridge Road, London SE1 0DN.

Keeping tabs

Diana Wyllie Ltd now supply clear self-adhesive index tabs complete with white label cards with DW viewports at no extra cost and are also offering a new filing bar for use in conjunction with "Jumbo" filing cabinets for storing overhead transparencies and records.

A new ring-binder is available at a cost of £2.80 plus VAT. It will hold up to 400 slides when used with 20 DW Viewport slide wallets containing 20 slide wallets.

Diana Wyllie Ltd, 3 Park Road, near Baker Street, London, NW1.

The mystery market

Hearne & Johnson seem to have cornered the York Mystery market and are producing posters, cassettes and slides on the plays and other Yorkist subjects. York Mystery Plays (reviewed last week) is a tape-slide sequence which includes 20-minute play, Herod and the Three Kings, and music by the Early Music Group of York.

Other frames show parts of York and the route taken by the wagons on which the traditional mystery cycle was performed. Twenty-four frames and cassette cost £5.40.

Other products include two cassettes: *We called them Tinklers*, "memories, songs and rhymes which paint a picture of the York as it was around the turn of the century"; and *Discant Time and Barrel Organs*, recordings of mechanical musical instruments from the Castle Museum such as the polyphon, musical boxes, paper disc organ, melodia and tinglary. Each cassette costs £2.60.

York in Colour is a 36-frame film-strip or six sets of six slides showing famous buildings and objects. Among the frames are the Shambles, Minster House, York Minster, Wharfedale Wharf, the Stonegate Devil and St Mary's Abbey. The filmstrip costs £2.80 and the colour slides, 80p a set. Add about 20p per item for postage and packing.

Details may be obtained from Hearne & Johnson, PO Box 52, York YO3 8PF.

Another title in the Helen Arkell Dyslexia Centre's series of booklets has just appeared: *Dyslexia: The Problem of Reading*. It has been written by Mrs. Joy Pullock, who runs the centre with Helen Arkell.

Other titles include *Dyslexia: The Problem of Spelling*, *Dyslexia: Books for the Dyslexic* and *Dyslexia: The Problems of Sequencing and Orientation*, all written by members of the Centre's staff. The booklets cost 65p each, with postage of 15p a copy and 2p each for further copies.

The booklets can be obtained from the Helen Arkell Dyslexia Centre, 14 Cranford Road, London SW6 4BB.

SIXTH FORM BIOLOGY AND BIOCHEMISTRY

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A teacher's manual and five students' manuals are included with each kit; the teacher's manual containing additional chapters on early enzyme discoveries, the chemical nature of enzymes, enzyme kinetics, commercial production of enzymes and their commercial uses.

Price £18.50/kit (incl. VAT, postage and packing). Kits produced by Novo Industri A/S, Copenhagen.



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TELEPHONE: WINDSOR 53657

WARNING LIVE TERMINALS



A range of labels including warning signs, instructions, letters and notices have been made up from Circuitape Special Label Service and are now available from that company. The labels are made in vinyl, are self-adhesive and come in handy pop-up cartons. Details of the full range of labels are contained in the latest issue of the Circuitape catalogue which is available from Circuitape Ltd, 33 New Street, Aylesbury, Buckinghamshire.

French course

Eclair, a two-year multi-media course, which was devised and produced at the ILEA Media Resource Centre, is to be published by Mary Glasgow Publications in all places other than those administered by the ILEA.

Eclair is a two-year course specially developed for mixed-ability classes in the 11 to 13 age range. It concentrates on motivating slower learners of French by providing a large amount of basic listening comprehension material than other first-year courses and by teaching an active, practical use of oral French.

Each of the six units contains 12 colour slides, 10 colour flash cards, one poster, one audio-tape, and one pupil's workbook and as supplementary visual material there are six 12mm colour films shot in Döppe with a humorous story line. For further information: Mary Glasgow Publications, Brookhampton Lane, Kineton, Warwick CV35 0JB.

Ideas,
argument,
experiences,
research

TALKBACK

Is photography an art
or science subject?/
Teachers as action
researchers

Technical or visual?

Michael Langford

After protracted and doubtful scrutiny, photography is now regarded as an academically respectable subject. CCE O and A levels, CSE Mode 3s and an earlier CCE craft option all testify to its acceptance as an area of potential achievement for young people.

The camera club enthusiasm which got it all started—the evangelistic fervour which raised a darkroom and acquired equipment—now has to give way to a sound pedagogic structure. The new subject exists, but as its novelty fades away, comes the crunch—how, and in what departments, should it be taught?

Photography cuts across the traditionally art-science stream of academic community. The subject's mixed content of technical facts and visual ideas has confused its function (and teaching) since earliest times. Which should come first—sound understanding of materials and methods, or development of visual aspects? Where published syllabuses exist at all they are open to interpretation. Life is further complicated by geographical evolution which may have placed the school's only darkroom in the science block, or the art room, or somewhere else altogether.

There are strong reasons for teaching the new subject from a technical point of view. After all, sound understanding of materials and methods is a prerequisite of any crafts' eventual application can be left to the individual. This approach lends itself to a structured curriculum, and work periods of a

length which suits the school timetable.

It is economical with equipment and materials because much can be covered by lecture/demonstration. Experiments have objective conclusions, and homework and examinations can be of the formal written kind. There is plenty of technical photographic weeklies—even a library of test paper questions from sources such as AEB and City and Guilds. The whole system can be filled out with chemical and optical mystique.

The case for visually oriented teaching of photography is possibly even stronger. This approach encourages the non-academic, the non-scientist, and even the sad outcast who "cannot do art because he can't draw". Photography, it can be argued, is a method of making pictures which does not demand that you be skilled at drawing; a means of expression which does not insist on command of words. But it does demand the ability to observe and communicate visually.

Giving priority to What and Why rather than How gets motivation going—cameras appear from home, technical information is consulted to achieve a wanted result. Captions are written, and people have even been known to research their subject matter. Photography is seen to form a link with the real world.

Planning this sort of visual course is more difficult and inconvenient. Projects have to be conceived within the current technical capabilities of equipment and user. Youngsters have to be allowed off school premises; results are for marking. In the last five years many books of collections of photographs have been published to give library back-up, and for sixth-form work

number of periodicals (such as *Creative Camera* and the *Half Moon Gallery's CameraWork*) cover philosophical aspects of the medium. Gallery exhibitions of photography have increased fivefold.

In schools where art and science are still considered "total" subjects, photography, therefore, challenges the values and advantages of specialization. Will existing structures allow it to be offered with a reasonable blend of both disciplines? With too much emphasis on one way, pictures are sharp and clear but have little to communicate. Over emphasis on the other way and a photographer with visual ideas is discouraged by his or her lack of control, and the apparent complexity of "the machinery".

In Britain teaching photography began in further education, has infiltrated the university level (BSc, and MA), and reached school level last of all. Further education met this dilemma of opposing disciplines 15 years ago, and at that time made what many educators consider the wrong decision. It placed photography courses mostly into technical colleges.

Since then, and particularly during the late 1960s, considerable expansion of photographic education at FE level has occurred—but almost entirely in art colleges. These centres have naturally taken a more rounded approach to the subject, necessarily so: students may not be professional, but need to use photography as a means of expression and communication. No one is supposed to be a scientist, but the scientist is devalued. His visual notebook is photography, but the medium's current acceptance (up to and including postgraduate level) creative medium is surely significant?



Portable camera obscura (1681) using a spectacle lens. An illustration from "Starting Photography".

can't? Even the CNA panel for assessing photographic courses, originally drawn from the council's science area, has recently been relocated in the art and design area.

Perhaps schools should avoid similar expensive mistakes by locating the new subject firmly in the art department. It is a cliché worth repeating that children in adult life are more likely to want to use a camera than a potter's wheel. And in every form of daily life, they ought to know something of the images are used to influence people. For some it will provide an unexpected entry to art education. Art college staff long ago abandoned A level art as being much of



Every Tuesday Peter Milne chairs the music meeting at Swinburne community school. Peter, who is 15, and the son of an architect, says he does not find it difficult. It is interesting; "Everyone is well-known and even outside people can come and see what we are doing. We have reports coming up—that's all the staff and a few things up. I. My mother thinks it's terrible, but I enjoy them."

Officially free

Tim Albert visits a
community school in southern Australia whose experimental work
is receiving state support



Tim Albert

Getting on the network

John Elliott

In the past there has been a division of labour between teaching and research. Professional researchers in universities do the research and teachers teach. The presence of this division means that professional researchers control what is to count as valid and public knowledge of classrooms. Can you imagine the findings of a group of practising teachers attracting the same sort of publicity as Neville Bonnett's *Teaching Styles and Pupil Progress*?

Teachers' concepts and theories of life in classrooms are rarely taken into account by outside researchers. Their interpretations and explanations of classroom events are assumed to be biased, and not grounded in relevant and sufficient evidence. Only the researchers' trained in scientific methods of investigation can give objective accounts of teaching and learning. Teachers have often criticised researchers' theories as irrelevant practice. Researchers have tended to respond by arguing that they must make their findings more relevant, or help teachers understand how relevant they are. Either way, the division of labour is maintained, and what is to count as valid public knowledge of classroom processes remains in the control of professional researchers, who do not teach.

The researchers' theories often cannot be made relevant to the complex practical situations in which teachers work. Professional researchers tend to take their concept from a particular theoretical discipline; for example, sociology or psychology. The data they select is guided

by their interests as a psychologist or sociologist. Teachers on the other hand develop concepts in the light of practical difficulties in the classroom.

Practical difficulties as opposed to purely theoretical ones are too complex to be understood from the standpoint of a single discipline. They require the use of ideas from different forms of theory. Professional researchers' theoretical problems tend to be determined by concepts from a simple discipline of psychology: their research starts with a problem as defined. Teachers' practical problems, on the other hand, are determined by their experience of failure in teaching, aspirations and values. They are felt, understood, and experienced before they are named. Once they are understood, the solution tends to be obvious. The solution tends to be a practical one, a practical teaching what ought to be done.

Action research seeks to solve practical problems by understanding the situation. The process involves a dialectic between data and concepts. Action researchers begin to select data according to certain concepts, but as they study it they are required to understand the problem. As these are generated they in turn dictate the search for more data. The understanding of the problem further concepts, which dictate a problem shift. There is no perfect solution, and no perfect solution.

Classroom action research means systematic but eclectic reflection on teachers' practical problems, with a view to deciding what ought to be done about them. It therefore involves participation by teachers. If research does not help teachers to understand their problems, it can

not feed their decisions and count as action research. If research generates understandings, which teachers do not perceive to be understandings of their problems, it cannot be action research.

Action research does not exclude outside researchers, though it may be conducted entirely through teachers' self-monitoring. But it does exclude outside researchers not involving teachers as researchers. If in classroom action research teachers foster a dialogue with others as full interview subjects, over what is to count as relevant and valid knowledge of their professional classroom decisions, they must be able to communicate freely with each other about classroom problems, and methods and techniques for collecting and analysing data about them.

The Classroom Action Research Network has been established with this in mind. The idea was generated from the work of the Ford Foundation project. This project, sponsored by the Ford Foundation, involved 40 East Anglian teachers and man and myself—in a four-term inquiry/discovery research into the project's findings and action research methods and techniques were published last year. Since then the project has stimulated the development of some action research projects which have also influenced some of the ideas in the United Kingdom and other countries, such as the United States, New Zealand and Canada.

One of the functions of the network is to make it easier to share ideas between teachers, researchers and outside researchers collaborating in different projects.

However, the network can also be used by people engaged in classroom action research unconnected with the work of the Ford project, and by teachers and others interested in establishing such programmes in schools.

The Classroom Action Research Network is based on these assumptions:

- Educational research, as opposed to research on education, focuses on the practical problems of educating pupils as experienced by teachers. It is specifically directed towards action and decision, and concerned about producing practical statements about what ought to be done rather than purely theoretical statements about what is the case.
- Classroom action-research means teachers participate actively.
- Their involvement in classroom action-research means that outside researchers must enter into dialogue with practising teachers.

It aims to provide a context in which teachers, in-service educators, and professional researchers develop procedures for classroom action-research. It also wants to increase the access teachers have to each other's ideas about how to approach the study of classroom problems, by fostering communication in this country and abroad, and give advice to groups who want to embark on classroom action research.

My responsibility as coordinator of the network is to monitor and make other members' access to each other's ideas. Three times a year a newsletter will be circulated which will include a list of members, addresses, with reports of ongoing projects they may be engaged in. A list of project reports, research methods and techniques, produced by, and available from, network members; details of seminars and conferences on aspects of classroom action-research; initiated

by members; details of conference members are prepared to assist others on the network.

Members would contact each other directly for resources and help. The central coordinator will be responsible for monitoring communication through the network and membership would be people to sending a brief report work in progress to the coordinator, and updating it directly to report two or three times a year. Informing the coordinator of developments as they become available, sending two free copies of statements about what ought to be done rather than purely theoretical statements about what is the case.

The Classroom Action Research Network is a small number of schools in the Australian state of Victoria which, though they are firmly within the official education system, are experimenting with different forms of education. They are the annexes of an inner city school, founded by Gerry Tickell, a teacher, and six full-time members of the community—through a policy of public libraries and artists, workshops and schools and institutions of learning, we want to draw the experience of kids, and bring the whole notion of a central, highly structured education system to show that you don't need a large, expensive system to provide a wide range of choices.

The free school movement seems to have arisen as a reaction to the slow rate of change in an overvalued state administration, and partly as a product of a growing interest in both teacher-union politics, and school development. In 1972, three schools were started: Huntingdale, Swinburne and Sydney Road. Today, there are eight surviving schools, and one has been founded. ("Too much counter-culture built working at home, or working with a painter in the community, then that's fine. It's up to him to negotiate out of the place.")

John Elliott is tutor in curriculum studies at the Cambridge Institute of Education, and Director of the Ford Teaching Project. Application forms for membership of the network are available from the Cambridge Institute of Education, 40 Bridge Street, Cambridge.

and an imposing wooden staircase) which used to be a Roman Catholic community centre, and where two rooms are still used by the Jesuits. It contains a tiny laboratory (once a lavatory), a lounge, four classrooms, and a staffroom-cum-office, papered with partitioned desks for the six full-time and five part-time teachers.

Next door is a peeling Victorian auditorium, once the scene for Irish dances but now used for drama and physical education. Next door to that is a former undertaker's parlour, still with the original lettering outside, but with six arts and crafts rooms within; and next door to that is a small hut for trade work which the students themselves have built out of breeze blocks.

It is not palatial, or even purpose-built, but that is the main point. "The school itself ought to be a modest institution," says Gerry Tickell. "If there are good reasons for having art and craft premises in a community, there are good reasons for having them available to the whole community. This means that there is no reason why they should be the responsibility of those whose full-time job is the teaching of adolescents. In that context a school becomes just a meeting place."

The Swinburne buildings are the meeting place for 100 students, half of them girls. Each elects to come here, and many have already been through the Amaze, also attached to Swinburne Tech, and in effect the "free" school's junior version. There is a wide range of ability, and students can be negotiated back into the conventional educational system and go on to tertiary education. Demand exceeds the number of places, the children are accepted on the basis of who lives nearest. There are a wide range of home backgrounds, although some critics have claimed that the school attracts mainly middle-class kids from outside the immediate community.

The day starts off with the register. "We run on the contract system," says Rob Lewers, the teacher responsible for visitors. "If a kid wants to come to the school they must obey our few rules. They must listen to the process of ratification of the rules, and they must work out with their personal tutor and their parents a programme of work that is suitable to their needs."

Attendance at the school is compulsory, but if a kid can put up a good reason, like working at home, or working with a painter in the community, then that's fine. It's up to him to negotiate out of the place. The day is split into three long sessions:

of an hour and three quarters, an hour and a quarter, and two hours. Generally, the later morning sessions are used for compulsory maths and writing workshops, or an optional reading workshop. The afternoon sessions are for special activity units, with two activities taking up two afternoons a week for a month and a third taking up all of Friday afternoon and lasting a whole term.

These activities are advertised in advance, use outside temporary staff and a variety of outside locations. The list included playing summer team games, making jewelry, advanced super-eight film, cakes and biscuits, electronic music, and the state elections.

But the first sessions of each day are more traditional, and take the form of what, despite the new labels, are really form lessons. The school is divided into four teams, one at third-form level, two at fourth-form level, and one at fifth-form level. A member of staff acts as team leader, and can use the periods as he sees fit. Rob Lewers, for example, has a three-year programme including drama, reading, trades, English, science, and a general studies project on a general theme of "the advantage."

The adoption of this system—flexible for the student but administratively complex for the staff—has been recent. "At the start we had a 'shortage' of staff," says Rob Lewers. "There were things being offered and kids just chose which they wanted to do. For the 30 or so kids who were motivated it was wonderful, but a fair number found it hard to pick their programme. And because we were offering so much, in the end we didn't care what the kids did, or even whether they chose anything or not."

In the end we had a whole series of curriculum meetings around the school. The staff had to fight hard to get the team structure, and it's only now that the students are admitting the value of having groups of people working together and sharing knowledge and friendship patterns, and getting to know kids they wouldn't otherwise have bothered with."

The key to Swinburne lies not in its curriculum, but in the extent to which it allows its students access to community decisions. In theory, it is part of the technical school, and Gerry Tickell is responsible to the technical school principal. In practice the control is minimal, and the free school has a per capita grant of about £3,000 a year to dispose of as they wish. Within this framework students are free to argue their own case, and since the community decisions are taken by consensus they could, in theory, win it. "If there really was a decision, which I couldn't

agree with, I would have to resign," he says. The machinery for participation is considerable. There are working parties in charge of, for example, the school bus or visitors, which must be necessary and report to the Tuesday afternoon management meetings. These meetings discuss matters such as the rules or the curriculum and each team sends a representative. There are also planning meetings, held once a month in the evening so that parents can attend, which discuss matters of policy and finance.

Every Tuesday evening there is a three-hour staff meeting which, unlike the others, is not open to all. (Rob Lewers stoutly defends this: "There are things that are private and connected with the kids that it is important for the staff to know...") Finally, there are school meetings for all staff and students every Monday morning, at which the decisions taken at the other meetings come up for ratification.

"Basically the kids have little stomach for government, and have little patience for committee work," says Gerry Tickell. "If anything, we have been disappointed by the limited interest of the kids in government. But they do still have the right to reject any decisions that have been made."

An apparently free curriculum tails for a much greater degree of organization and effort from members of staff. The principal seems to be keeping his feet very much on the ground. "I think we have become a bit more astute in our analyses," says Gerry Tickell. "Some people may say we aren't alternative enough, but the short answer is that we are operating and they aren't. You can't keep your principles absolutely pure and clean and be effective. We are aware we are making compromises and we don't need left-wing university students to tell us that. But we also believe that we have become a haven for change—the thin end of the wedge."

An important point is that the free school movement is official; but it is also a danger. "I don't know why the traditionalists have allowed us to continue," said one teacher. "The administration is tending to say that they are not going to initiate any more projects, and that they are looking for local initiatives instead. In theory you can't criticize that line, but in practice it means that it will allow the thing down. I don't think places like ours will be shut down—but you must remember that we will still have to cope with the notion that they must continue to justify themselves. Other places don't."

Tim Albert is a freelance writer and editor, and a former teacher. He is currently working on a book about the free school movement.

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Nursery Education

BENKING
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Benking Nursery School, Benking, Kent. Closing date: 15th July 1976.

COVENTRY (City of)
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Coventry Nursery School, Coventry. Closing date: 15th July 1976.

HUMBERSIDE
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Humberside Nursery School, Humberside. Closing date: 15th July 1976.

LONDON
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, London Nursery School, London. Closing date: 15th July 1976.

Primary Education

BUCKINGHAMSHIRE
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Buckinghamshire Nursery School, Buckinghamshire. Closing date: 15th July 1976.

CUMBERIA
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Cumberia Nursery School, Cumberia. Closing date: 15th July 1976.

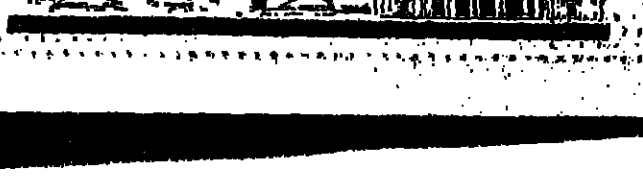
Headships

BUCKINGHAMSHIRE
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Cambridgeshire

CAMBRIDGESHIRE
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Cambridgeshire Nursery School, Cambridgeshire. Closing date: 15th July 1976.

CAMBRIDGESHIRE
NURSERY SCHOOL
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CAMBRIDGESHIRE
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Doncaster

DONCASTER
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Doncaster Nursery School, Doncaster. Closing date: 15th July 1976.

DONCASTER
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Doncaster Nursery School, Doncaster. Closing date: 15th July 1976.

Lincolnshire

LINCOLNSHIRE
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Lincolnshire Nursery School, Lincolnshire. Closing date: 15th July 1976.

LINCOLNSHIRE
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Lincolnshire Nursery School, Lincolnshire. Closing date: 15th July 1976.

Solihull

SOLIHULL
NURSERY SCHOOL
Applications are invited for the post of Nursery School Teacher. The school is in a large house and has a good reputation. The teacher will be responsible for the education and care of children from 2 to 5 years of age. The post is full-time and involves a salary of £10,000 per annum. Applications should be sent to the Headmaster, Solihull Nursery School, Solihull. Closing date: 15th July 1976.

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Wiltshire

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North Yorkshire

NORTH YORKSHIRE
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Powys

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Derbyshire

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EXTRA TECHNICAL BOOKS

The technician's lot

F. W. Kellaway

Education and Training Technical By A. MacLennan. Commonwealth Secretariat £2.00. 0 110105 8. Standards for Engineering Qualifications. The Unesco Press/HMSO £1.90. 0 110105 5. Design Education in Craft and Technology. Edited by F. R. Kellaway. £2.95. 0 7134 3178. £1.75. 0 717 6.

A decade has passed since the special conference on technician training held at Huddersfield under the aegis of the Commonwealth Education Liaison Council. In Britain, the Technician Education Council is taking over, and it is possible that levels of examination achievement may change. Mr MacLennan's analysis of the needs of the technician apprentice will, however, be of value to any curriculum planner.

Not surprisingly, he emphasizes the need to train technical teachers. He recognizes that there are many aspects in common with those of other areas in teacher training, but this is one of shifting sands rather than of stability. Phrases such as "educationally diverse", "socially relevant" and "vocational industrial orientation" creep in here. Basically, of course, the problem is one of finding qualified, dedicated people—and they are scarce. But so are good technicians, and they must be found, trained and properly employed. Mr MacLennan points the way once more; perhaps it will be followed now.

There are many associated questions. One in particular needs a fresh airing: whatever happened to rationalization? In the 1960s a brave effort was made to establish guidelines ensuring that the size of classes in technical colleges should attain a sensible minimum figure, and that wasteful duplication of similar courses in neighbouring institutions should be eliminated. There is little evidence that any dramatic action ever resulted, and currently there are many ways in

which expenditure on higher and further education could be reduced, or—alternatively, where better value could be obtained from existing budgets.

It is good that thought should be given to the aims and content of technician training programmes; it is sensible to make the most effective use of resources. Mr MacLennan's chapters on finance just touch on this; a much more substantial line would be welcome.

The other two books, valuable and interesting, are overshadowed by the first. They, too, are concerned with function and attainment rather than with money.

The comparative study from Unesco explains the situation in 18 European countries. It defines "conception engineers" (technologists accustomed to think in abstract terms; practical men who can take a synthetic view), "Lidson engineers" (who understand abstractions and can translate them into practical language), and "execution technicians" (responsible for carrying out projects deriving from the work of those in the other categories). The type of education (and especially, the criteria for qualifications for members of each category) provides a fascinating, stimulating and provocative picture.

There are common denominators between the British system and the "Conventional" system which prevails in 16 of the 18 countries. They are sufficient to allow the report to suggest that a "single and coherent whole" system for Europe can exist, which might be applied also outside Europe. The universal need for a recognized, and supervised, training is also emphasized.

School and college work come together in 17 papers given at a conference of the Institute of Craft Education held in April this year and collected in a useful volume which predigests the claim for design in education. Mr G. B. Harrison argues the "total interdependence of art, craft and technology", and Mr P. E. Dutton discusses how to examine design and craft to mention just two contributors. Both imply that it all depends on the teacher. Mr MacLennan would certainly agree with that.

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Schools Technology Books from Hutchinson

Craft and Design in Wood
David M. Willacy
Book 1 Materials, Constructions and Finishes
09 114711 5 paper £1.50 non-net, published 1973
Book 2 Hand and Machine Tools
09 114721 2 paper £1.50 non-net, published 1974
Book 3 Design and Allied Craft Techniques
09 115631 9 paper £1.50 non-net, published 1975
The complete woodworking series for CSE students is now available. The main feature of the three books is that the basic text is linked to a vast number of photographs and simple line drawings, so that they are ideal for fourth and fifth form pupils of all abilities.

A Practical Approach to Engineering Science
F. G. Birken, D. Harrison, J. Hilsom & K. Widdowley
A practical text for students of engineering science at school or technical college. The book is designed to encourage a scientific approach to problem solving, and each topic includes ideas for further experimental work and allied projects. Fully illustrated.
09 124461 X paper £1.95 non-net. Published 1976.

Modern Materials for Workshop Projects
F. G. Birken and J. Hilsom
The book discusses the basic properties of a number of modern materials, their application and the general techniques of their correct usage; the numerous illustrations should enable both the CSE and GCE project worker to use the book effectively and profitably.
09 112791 2 paper £1.25 non-net. Published 1973.

Also available:
Electronics for Schools R. S. Sparkes
09 112781 5 paper £1.25 non-net
Plastics L. S. Brough
09 114731 X paper £1.50 non-net

For inspection copies and for further information about these and other technical books please write to Gladys Campling, Department A6, Hutchinson Publishing Group, Church Road, Tiptree, Essex.

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'The object of presenting technical drawing as an interesting educational subject joining the mathematics or constructional and three-dimensional geometry to the knowledge and skills of the wood and metal crafts is well achieved and the books should be very useful in secondary schools.'

The Times Educational Supplement

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Metals, plastic and concrete

Alan Edlund

Metals
Cassell's Metalwork Notebook. By Alan Edlund. 304 29459 4.
Metals Today. By L. Armstrong. 304 29459 4.
Fundamentals of Welding Skills. By Alan Edlund. 304 29459 4.

Plastics
Metals and Technology—Metal. By Alan Edlund. 304 29459 4.
The Creative Use of Concrete £1.80. Design and Technology—Plastic. By Alan Edlund. 304 29459 4.

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problem-solving approach, but with its step by step instructions is really just yet another school metalwork textbook.

The development of metalwork teaching has meant the installation of welding equipment in many schools, so there will be a welcome in the book. The book is intended for students studying welding in their first and second years at college, there is much which will be of interest and use in schools.

The techniques of arc and oxyacetylene welding are described and illustrated in detail. There are chapters on gas-shielded metal-arc and tungsten-arc welding, as well as on quality and inspection with a summary of other welding processes and techniques.

Messrs Bridge, Heddle and Hicks have completed a third volume in their Design and Technology series, and are concerned with metal. In it is presented a series of graded problems requiring an exploration of the physical properties of metals and alloys, thereby helping the student to the solution of specifically connected design problems. The explorations go through the areas of metal structure, fusibility, malleability, hardness, cutting and toughness and end with a study of mechanisms.

A judicious use of blue ink emphasizes parts of both text and illustrations.

To help the student to develop his understanding of the design process and rationalize his understanding of the properties previously explored, 85 more sophisticated problems are posed at the end of the book.

Last autumn saw the appearance of three books for teachers as part of the varied publications which resulted from the Schools Council Design and Craft Education Project. They differ from other project publications in that they deal with areas of craftwork which are more specialized than the general work of craft education. Designing with Plastics is a brief survey of the possibilities and use of plastic in schools.

The Creative Use of Concrete in addition to comprehensive notes for the guidance of teachers in the design and creative aspects, includes notes and commentaries to accompany the relevant illustrations.

Foundation Design Simply Explained

John Faber and Brian Johnson

The first edition of this book, published in 1961, immediately became popular with students of engineering and architecture, as well as with draughtsmen and assistants interested in a practical understanding of foundations. In this new edition, the text has been brought completely up to date, and is in line with the latest Codes of Practice—CP2004: 1972 for Foundations and CP110:1972 for Structural Concrete. S.I. units are used throughout. Second edition £3.95

General Engineering Science for Technicians

R. J. Besanko and T. H. Jenkins

This established textbook has been expanded, revised, and updated to cover the courses in engineering science offered for the Technician Certificate and Diploma of the Technician Education Council (TEC). The main subjects covered are statics, dynamics, heat, electricity, magnetism, and chemistry. There are numerous worked examples in the text, and a graded selection of problems is given. S.I. units are used throughout. Third edition illustrated paper covers £2.50

Materials and Processes for Electrical Technicians

L. C. Mott

Technicians employed in the electrical industry need to be familiar with a wide variety of materials, with their properties, methods of production, and processes, and the associated tools and equipment. This book aims to provide that knowledge, and has been written to cover the syllabus for the City and Guilds of London Institute's course 281: Electrical technicians. £5 paper covers £1.95

Engineering Drawing and Construction

L. C. Mott

For the second edition of this book, which uses S.I. units exclusively, the two volumes of the first edition have been combined in one. This gives a complete text for such established courses as the General course in Engineering, the Mechanical Engineering Technicians course, Ordinary National Certificate, and G.C.E. 'A' level, as well as for the Technician Certificate and Diploma now being introduced by the Technician Education Council. Second edition paper covers £2.95 for the combined volumes. Inspection copies of these books are available to lecturers wishing to consider them for adoption as required texts. Please write to the University Promotion Section (TES), Oxford University Press, Ely House, 37 Dover Street, London W1X 4AH.

Technical Drawing



W. F. Malcolm and P. K. Stoddart

A set of 32 spirit masters each of which is capable of producing 250 copies. This selection of drawing exercises may be used in any order. All the suggested views may be drawn or only those which the teacher feels necessary for instructional purposes or to consolidate previous work. The exercises may be introduced at any stage of any technical drawing course. British Standards Institute recommendations as set out in BS308/1972 are followed throughout. The solutions are given on the top side of the master or on a separate page.

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For a free sample of Technical Drawing Spiritmasters write to: Maureen Foster, Oliver & Boyd, Croythorn House, 23 Revelation Terrace, Edinburgh EH4 8TJ.

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A list of the special insets planned for publication in the TES during the second half of this year is available from the Advertisement Manager, The Times Educational Supplement, P.O. Box 7, New Printing House Square, Gray's Inn Road, London WC1X 8EZ.

Vitamins and minerals

O. F. G. Kilgour on food and nutrition

Teaching Nutrition and Food Science, by Margaret Knight. Basil Blackwell, £3.95. 7134 3094 X. £2.75. 30990.

Introduction to Nutrition, by Henrietta Fleck. Collier Macmillan £6.50. 02 338430 1. The Facts of Food, by Arnold E. Bender. Oxford University Press £3.50. Opa edition £1.50.

Diet Revolution, by Jill Wordsworth. Gollancz £3.95. 575 02056 3.

Students of food science and nutrition could be discouraged by the title *Teaching Nutrition and Food Science* on the assumption that it was intended for teachers—and there is the rub. In 15 chapters Margaret Knight has written in a clear, concise, accurate style, the essentials of introductory studies sufficient to meet the needs of those students following examination courses listed in her preface, especially of those from non-scientific backgrounds.

A brief introductory chapter on physical and chemical aspects is followed by chapters devoted to digestion, energy, the major nutrients, and the food commodities—milk, milk products, eggs, meat and fish, cereals, starches and sugars, fats and oils with a final chapter on vegetables and fruits. There are almost 90 outline accounts of practical investigation and experiment, together with 40 tables, and 63 line drawings, composing this interesting introductory text of 176 pages.

Introduction to Nutrition is an attractive book following the style, size and pattern that we have come to associate with texts produced in the United States. Included in the 34 chapters there are studies ranging in depth of the major nutrients in 14 chapters, four of which are devoted to vitamins and three to minerals. The remainder are concerned with dental health, nutritional needs of infants, children, adults, the old, and pregnant and nursing mothers. Diet, food purchasing, snacks, food fads, world food problems, and future developments complete the text.

Appendices include an extensive glossary, food composition tables over 26 pages, and daily recommended nutrient intakes for Canada. In addition to the FAO/WHO table.

This book, written in a country with the largest resources of food in the world, is certainly catering

for the American readership, primarily for the needs of a college student on an introductory course in nutrition; but it will be a useful reference book, especially for teachers.

The Facts of Food is published as part of a series written as an intelligent guide for the layman on topics which include the solar system, ecology, and the brain. Nutrition is presented in a stimulating, informative manner with common-sense approach for everyone interested in what they eat.

After outlining the aims of nutrition and its interdependence with other scientific disciplines, Professor Kendall proceeds in a simple lucid account of nutrients, energy needs, and outlines of experimental work and surveys conducted in nutrition. Food sources, dietary needs, taboos, and food fashions lead to a consideration of food preservation and additives. Diet and disease receive deserved attention while methods of improving food production bring the text to its closing chapters which deal with protection of the consumer, and a consideration of world food problems.

Diet books, magazines, food reformers and nutritionists seem to confuse the earnest reader in search of guidance concerning the rival theories setting out to explain the food fads, fallacies and myths. In *Diet Revolution* the author has set out to summarize the many rival theories competing for attention by setting them side by side for us to form our own opinion.

Jill Wordsworth is a scientist and admits to no special training in nutrition, yet she has produced a book with considerable journalistic skill in researching exhaustively through the published literature and consulting nutritionists, food scientists, urologists, osteopaths and also with commercial food vendors, food enthusiasts and emotional nutters. The outcome is a fair and balanced treatment, surprising in its impartiality, written in a smart, incisive style in a light humorous vein, which should attract the attention of the sceptical.

Each chapter includes questions which occurred to her when she began to delve into food reform. Her own answers are composed of food reform opinions in general. A good index and extensive bibliography complete the 190 page text.

To be the perfect secretary

M. F. Underhill on office practice

Test your knowledge of office practice, by Mary Robinson (Cassell, 75p). It covers all aspects of office practice. It consists of a series of questions, of the true/false and multiple answer type, with answers supplied, which would be useful for an office practice teacher to use for quick revision tests. It is possible to test out the answers pages without removing any of the question pages.

The Office Book 1, by Millie Pincott (Longman, £1.95), is intended for students studying for private secretary's and personal assistant's diplomas and certificates. It assumes a basic knowledge of clerical duties and elementary commerce and goes on to provide a more advanced view of the overall possibilities of various departments in an organization. It is good to see up-to-date chapters on data processing, VAT, central and local government, etc. but as in all comprehensive texts, continuing developments may soon overtake some of the information.

My first impression of the text was not very favourable. The print is rather small and closely set and through from the back of the page. But the text itself is readable and the fictitious character used to illustrate the topics covered maintains the interest. It is a pity that the extensive copiousness compensates to some extent for this.

Assignments in Office Practice, by D. R. R. Herbert and J. Owen (Macdonald, £6.95), is a very good book of assignments for the working of assignments into their office practice.

Some of the assignments are more inspired than others. The instructions for their office practice assignments, emphasize that "one of the main criteria should be that an assignment is an exercise which cannot be easily set as part of the written paper in Office Practice". This book expects many essay style answers which could have been answered in an examination room. However, out of nearly 400 assignments in the book (covering a wide variety of topics), a good proportion would be in the spirit of that exercise. There are 20 different assignments, included—these could be reproduced by students or teachers for practice purposes.

Office Practice, Book Two, Hand-book and Solutions (second edition), by Maurice Watchman and Beryl Harding (McGraw Hill, £2.75), is one of a series of new office practice books, consisting of two books for students and two teachers' hand-books. Written mostly by the late Maurice Watchman, these books contain an abundance of tests and suggestions for brightening up the office practice lesson. Any teacher, experienced or otherwise, could not fail to find much of interest here. Mr Watchman's enthusiasm for his subject and his ability to conjure up an exciting and practical lesson using inexpensive and readily available materials communicates itself to the reader. The books cover the syllabus fully for the following examinations: RSA Office Practice Stages I and II, Secretarial Studies, Certificate in Office Studies, and other regional boards.

GET HELP WITH HEAVY LOADS



Workbook on Office Safety Organisation" by Stanley Rich is published by Cassell in a full of sensible advice, much illustrated in a humorous, arresting way.

Principles of power

Clifford T. Jenkins

Electronics Engineer's Reference Book (fourth edition), Edited by L. W. Turner. Newnes-Butterworth £25.00. 00168 2.

The extraordinary growth in the development and application of electronic technology is advancing at such a prodigious rate that it is presenting an appreciable problem in the sphere of technical education. The rapid expansion of a many complex techniques over the past two decades is demanding that the technologist must be kept abreast of the innovations in the exciting field of electronics. It is encouraging to find outstanding publications that respond to the challenge of this dilemma. A completely revised reference book is a splendid example.

Within a single volume, the editor has adeptly collated the experience of 61 specialists, many of international repute, and from an incredibly diffuse background, he has managed to present a remarkably coherent and lively text. Beginning with an interesting history of electronics and its physical structure there is a logical progression through the fundamental building blocks which leads into the principles of integrated circuits and microelectronics. A section on electronic instrumentation is included. The wide spectrum of telecommunications, general broadcasting, and colour television is covered in some detail. Reference is made to some of the more important developments in the application of electronics to industry, commerce, medicine, and space.

There is a fascinating section on electronics in space which reveals some interesting insights into the construction and operation of satellites. The information on applications covers aspects of aviation, marine and oceanographic, motor vehicle testing and control with particular emphasis on the impact of electronics in the modernization of our national railway system.

Naturally a single volume reference book has to contend with certain limitations within the realm of the editor's right to acknowledge. Each topic could be treated with more depth and with helpful references for those interested in obtaining further information on the subject. One cannot fail to be impressed with the book's quality of presentation, with its numerous illustrations and selection of illuminating photographs. It is unhesitatingly recommended not only to all who are specialists but to all who are concerned with the dynamic subject which is revolutionizing our society. Libraries and educational resource centres would enhance their service by obtaining a copy.

Steering a course

B. G. Grimmett on heavy vehicle and motor vehicle technology

Heavy Vehicle Technology, by D. J. Teasdale and B. Hartley. Macdonald £6.50. 09 124540 0. 1908. 00 124541 9.

There have been numerous publications on motor vehicle engineering, but in the majority of cases they have excluded heavy vehicle technology. This book is a positive step towards fulfilling this basic need, in particular for students who are studying the City and Guilds of London Institute, 381 Heavy Vehicle Technology Course.

Many of the basic principles of motor vehicle engineering have deliberately not been included, as the authors feel that these matters are more than adequately covered in the numerous volumes by the same publisher. The fundamentals of heavy vehicle technology though, are covered in a broad manner, and at length. Those that are given only a surface treatment extract from the true value of the book.

The main areas of technology are formulated into a logical flow pattern of vehicles and the various systems, including engine, gearbox, clutch, suspension, steering and electrical equipment. There are over 200 illustrations, which on the whole serve to complement the text, but in some cases, where known manufacturer drawings have been used and considerably reduced in size, this has resulted in a lack of clarity and the loss of a valuable visual aid.

However, there is no doubt that the book, which is presented in a neat, accessible, clear and easily readable style of printing, will establish itself as one of the standard textbooks for the Heavy Vehicle Craft Studies course.

Objective Tests in Motor Vehicle Craft Work, by J. T. N. Gileard. Edward Arnold £1.65. 7131 3354 6. 1908. 00 124541 9.

Over the past few years there has been a progressive move towards questions concerning objectives in craft level examinations—by both City and Guilds and the Regional Examinining bodies.

It is a pity that the examining boards require that all papers both used and unused must be returned in order that the confidentiality of the question may be retained for use in future years. This denies both student and lecturing staff of the access to past papers, which may be used either for mock examinations or to present the student with the format and an indication of the type of questions proffered.

J. T. N. Gileard's book will form a bridge between these two positions for it contains over 500 multiple choice questions which follow closely the pattern of the City and Guilds 380 Motor Vehicle Craft Studies syllabus.

The book is divided into 16 separate sections covering the vehicle itself, suspension and steering, engine and fuel system, transmission, brakes, electrical systems, vehicle parts, heat, work, materials, measurement, fastenings, lubrication, communications and calculations.

Although the author indicates that all the questions were field tested, I should certainly be interested in the results; in some cases I do not concur with the answer given, and in others I feel the distractor answer would produce a return higher than would normally be acceptable with this method of questioning. Time will tell how useful the book will be.

The Car and how it works, by S. B. and T. G. Emes. Edward Arnold £1.80. 7131 0004 4.

The aim of this book is to present, by the use of 330 diagrams and photographs, information about the car and how it works in an elementary and easily digestible format. The book is intended primarily for students on a link course or for those undertaking a CSE in motor vehicle work, but it would be equally suitable for a person who has difficulty in following a standard technical textbook.

The first chapter begins with a photograph of the passenger seating arrangement, one of the seating surrounded by the car frame, and then one of the wheels which support the vehicle. This process continues throughout; each major component of the vehicle is taken in isolation and, by additional photographs, is built up to present the complete unit in the final photograph.

It is unfortunate that an engine of the overhead camshaft type is the primary source of photographs. This method of presentation would have had a much greater impact if the side camshaft type had been used, as this is readily identifiable by most persons.

In the text itself there are a number of parts which are incorrectly identified, together with a misleading description of the distributor. However, these shortcomings should in no way detract from the merits of this well presented and well bound book.

Commercial concerns

Alan Hooker

Commerce Today, by W. G. Skinner. Hodder and Stoughton £1.55. 0 340 19668 8.

This is a very readable book for which the author does not make extravagant claims. The subject matter is explained in simple terms and is well supported by numerous photographs and diagrams. I would strongly recommend it for COS/CSE students, although some of the topics go beyond the syllabus. Conversely, for O level students I would suggest it as a good auxiliary book, as I consider that some topics lack sufficient depth. Commerce study can be extremely boring unless the chosen book(s), backed up by an enthusiastic lecturer, can give it life. Mr Skinner succeeds in his aim: "To make commerce not only useful, but also highly interesting."

Workbook on Commercial Documents, by M. Leaf. Cassell £1.10. 0304 29390 6.

In reading this book my first thoughts were (a) For what ability/age-group is it intended? and (b) Does the pattern serve the requirements? The simple "story-book" approach is ideal for the less able student, but this is negated by the mass and complexity of the many examples. In short, has the author used the proverbial sledge-hammer to crack the nut?

Commercial Documents has its place in various syllabuses but does it require 60 pages? To sum up, the book has much in its favour, but can it compete against the many excellent and realistically priced books covering the whole of commerce?

Technological

Superstar Technologies: a report by the Council for Science and Society. Harry Rose, £2.00. 85992 062 3. The Steering Wheel of Destiny, by Edward Semper. National Centre for School Technology (35p post paid).

Technology has a high sense of the dramatic; the medium has over-taken the message. The titles of these two pamphlets are neither astrological nor scientific; rather, they are counter-evangelical.

The Council for Science and Society, formed three years ago, does in fact contain a shimmering galaxy, from Banton to Ziman. This report of a working party was one of its first projects, set up to investigate the social implications of large-scale technical projects, and to suggest mechanisms for effective monitoring. Mr Semper, a grammar school headmaster, sees technology as a central feature of life in modern societies, and makes a plea for a humanistic approach towards "technological literacy" as an essential part of school curricula. Both of these concerns are, of course, essentially political and as such controversial. While it may be futile to deplore the fact of technological advance, it is surely socially responsible to develop criteria by which to assess its worthwhileness. This is a proper educational concern.

The authors of *Superstar Technologies* spell out with clear and frank authority what has become a general anxiety about the power, cost and uncertainty of many complex and exotic projects. The size of the investment and fragility of rationale have often induced a patriotic protection (Apollo, Concorde, nuclear technology). But in the age of Hiroshima, Plixborough and Chalkidiki, patriotism is not enough.

The professional expert has a moral obligation to protect the general public from a potential danger—an obligation that takes precedence over loyalty to his boss, his company or even the state.

How does the teacher handle that unquiet conscience? If there is to be real monitoring at every stage of a project, then there has to be a "participatory technology"—which by definition, cannot be secret. It is one thing to move a motorway or resign an airport; the potential scars are obvious. The use of new and possibly dangerous construction techniques, or drugs, or surgical procedures requires far more public provision of information on the basis of which there can be informed discussion.

There is a similarity here to the way in which curriculum development evaluation has shifted from a narrow attempt to measure the efficiency of materials and the achievement of objectives, to a descriptive analysis of process and decision in order to provide evidence to decision makers (teachers, local authorities, parents).

The working party proposes an independent (but publicly financed) Technology Implications Committee, which would not only monitor new proposals, but have a responsibility for close supervision at all stages of development, and even after completion of the project. Embedded here are sensitive and difficult issues, ranging from national interest, to conflict of interest. Who would persuade BAC workers that Concorde should be abandoned in the national interest? What government would ban the sale of cigarettes and lose massive tax revenue?

Mr Semper's case is that the inclusion of technology within the curriculum would generate that understanding essential to intelligent public debate, as well as inculcating community values. He sets out some simple themes which could be followed from primary through to sixth form. Presumably, until that kind of comprehensive commitment is made, there will not be the time available to undertake a widespread responsibility for the activity.

There is little doubt that the members of the working party would agree with Mr Semper's approach to the problem, which they have defined, as probably the only long-term answer to the "general reluctance of society to impose qualitative considerations upon quantitative decisions." This study is the way to avoid the major social benefit from the space programme. Maurice Piskow



The Car and How It Works

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The book will be of particular interest to 14-16 year old students with no previous experience in motor vehicle work.

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Limp £1.80

An inspection copy of 'The Car and How It Works' is available on request to the publisher.

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London W1X 8LL

Material advances

J. H. Elliott

Materials for Technology Students.
By Vernon John.
Macmillan £3.95. 333 17641 3.

Materials science now occupies a major slot in the OND Technology and GCE A level Engineering Science courses, and this book is intended for students taking such courses. The plan of the book in fact follows the OND technology syllabus closely, approximately similar proportions of the pages in the book and time in the syllabus being devoted to the structure of materials (35 per cent), bulk properties (40 per cent) and materials technology (25 per cent).

The approach to the structure of materials section is a simple descriptive one. Although s.p.d.f notation is introduced, it is not used in the discussion on inter-atomic bonding and this inevitably leads to some cases of difficulty in interpretation. Apart from difficulties of this sort, the material in this section is well presented and should be readily understood by OND technology students.

The bulk properties section of the book which follows that on the structure of materials begins with a consideration of mechanical properties from a phenomenological standpoint dealing successfully in separate chapters with macroscopic elastic properties, shear forces and bending moments, the theory of bending and the theory of torsion. The contents of these chapters bear no relation to the earlier sections of the book and it is only when the chapter on plastic behaviour is reached that the type of material is specified and atomic considerations re-appear. Having dealt with mechanical properties the author interjects a chapter on phase diagrams before going on to consider electrical, magnetic, optical, thermal and other properties and this introduces yet another discontinuity in the development of the subject.

The third section on materials technology includes separate chapters on forming, cutting and joining processes and ends with a short chapter on materials selection. The main emphasis in this section is on the forming of metals, but brief mention is also made of plastics and ceramics as occasion demands. In general, the book bears a close resemblance to the author's *Introduction to Engineering Materials* but the chapters on shear forces and bending moments and on the theories of bending and torsion are new. Despite the discontinuities introduced by these new chapters, the book covers most of the OND technology syllabus admirably and the individual chapters are well written.

With the aid of a teacher who can expand on the various topics and supply questions and exercises for the many chapters which have none, this should prove a welcome addition to the literature.

A new text for the first course in thermodynamics taken by new students of engineering has recently been published by Collier Macmillan. Francis F. Huang's material is set out in clear sections and there is a detailed index. The book costs £6.00.

Schools Council

Project Technology

Basic Electronics

Basic Electronics has been produced to meet the need for a course in electronics which is suitable for wide age and ability ranges. It combines essential theory with practical applications. The course could be followed over a period of two or three years by 13/14 year olds of average ability. Alternatively, the material might form the basis of a shorter, more intensive course for older, more capable students, or even teachers themselves.

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Teachers are invited to write for inspection copies on approval

Hodder & Stoughton

Dept. E1189, P.O. Box 702, Mill Road, Dunton Green, Sevenoaks, Kent TN13 2YD.

Maths for technicians

Richard Walker

Second Year Technical Maths.
By Rhys Lewis.
Macmillan £2.45. 333 17846 7.

This book is the second in a series of three, designed to supply the mathematical knowledge likely to be required by students taking electrical and electronic technician courses.

It is competently written, with a neat layout, good graphical work and examples worked in a less terse style than is often the case. The usual exercises and test papers have been included. However, good new textbooks are being produced all the time; unless a book has some special merit the interests of teachers and learners have not really been served. Here I found nothing treated with any great originality.

A book wedged closely to a particular type of course, and to applications rather than theory, is always in danger of being rather dull. No view of the full range and power of mathematics is conveyed, because only a tiny part of the subject is being presented, and that in artificial isolation. The material tends to be fragmented; because of this, there is little sense of the unity of the subject.

Even those who need mathematics solely as a tool, surely deserve occasionally to feel some excitement and interest; the subject could have been approached far more enthusiastically.

Fake fur, velvet, Lurex

Sewing with Synthetics. By Molly Mordle-Barnes.
Pitman £1.90. 273 00450 6.

The aim of this book is to give information on synthetic fabrics which will enable the reader to make choices successfully in this medium. Most of today's fabrics are of mixed fibre or of entirely synthetic materials and would create problems if sewn and pressed in the traditional way. The information in this book is therefore particularly well-timed and suitable for the young adult dressmaker who can already sew.

With the aid of helpful line drawings the author suggests well-tried and often very unorthodox techniques and processes to cope with, for example, fake fur and Lurex, lace, see-through and stretch fabrics. At times a tube of adhesive is more useful than needle and thread, and paper clips preferable to pins. One chapter is devoted wholly to choosing correct interfacing and grades is given at the end of the book. Throughout, measurements are given in metric with imperial units in brackets, and a good index is added.

Helen Stanley

Pumps and motors

Joan Shawe

Fluid Power Engineering. By D. E. Turnbull.
Butterworth £8.00. 0 408 00199 2.

There are not many texts available on fluid power engineering, and it was expected that one of them, D. E. Turnbull would be a valuable addition.

The first chapter briefly describes the principles of fluid flow and gives a brief mathematical relationship; knowledge of the various symbols is assumed. Properties of fluids are discussed and an extensive table is given of some properties of commercially available mineral oils.

Several types of bearing are described; the forces on them; this is followed by a lucid and well-presented chapter on seals. All the more important types are explained together with performance characteristics. An historical survey of pumps and motors precedes a chapter on pump designs and a reference to examples of their operation is given.

Finally, several types of servomechanism characteristics and design are followed by some consideration of system response. There are extensive references and bibliography, but scarcely any published after 1970.

The book states that it has been written primarily to provide a comprehensive background to course material for both students and practising engineers. Unfortunately, it falls short of its title, pneumatic and hydraulic systems are not covered, and there is no coverage of systems for sequential control and digital servos.

Apart from the chapter on seals, the book seems like a collection of articles written some time ago. There is a lack of detail in many places, graphs are given without scales, and typical values of parameters are often not given.



Sixteenth-century brick making in Germany. "Bricks to Build a House," by John Woodford (Hodder & Stoughton £3.50) tells the story of the brick and equipment and techniques used in brickwork, from ancient times to the present day, are illustrated throughout the book.

Lines, curves

Drawing for Design and Technology Unit 1 Pictorial Drawing, Design and Model Making. £2.50. By J. E. Mattick. Foulsham.

These are the first two units of a set of seven dealing with various aspects of technical drawing in preparation for a variety of school examinations. The work is presented clearly with some illustrations of modern technical products. Although an early statement of the fact that skill is needed to use an orthographic projection, the projection is presented with examples. The early use of such curves and templates is, in question, it probably being more valuable at this stage to encourage the student to draw freehand. The point of view perspective is well presented, supported by good drawings and oblique projections are treated briefly but effectively.

Various constructions are explained for dealing with lines, arcs and good suggestions are made for the use of clay models. This is followed by the normal treatment for surface developments with simple forms leading to more complex ones. The value of models in dealing with problems of construction is used to introduce a brief treatment of card and paper model making. There follows a good section dealing with auxiliary projections and then come sections on isometric drawings and isometric projections.

The second unit is a small but useful handbook-most of which is devoted to representative symbols used in circuit drawings. The last part of the book deals with the preparation of such drawings.

C. W. Taylor

PRIMARY

Continued from page 28

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(London Borough of
MATHURSON SECONDARY SCHOOL)

Redhurst School, London N16 1JH, is a comprehensive school for boys and girls, aged 11 to 16. It is a day school with a boarding house for girls. The school is situated in a residential area and has a large playing field. The school is a member of the London Education Authority and is a member of the Association of Secondary Schools.

WALTHAM FOREST

Waltham Forest School, London E11 1JH, is a comprehensive school for boys and girls, aged 11 to 16. It is a day school with a boarding house for girls. The school is situated in a residential area and has a large playing field. The school is a member of the London Education Authority and is a member of the Association of Secondary Schools.

Lancashire
County Council

Closing date 18th July 1976.

Primary and Special Schools. For application form and stamped addressed envelope to Chief Education Officer, P.O. Box 61, County Hall, Preston, PR1 6RU, unless otherwise stated.

Secondary Schools. Forms/PHT details from and returnable to the Headteacher at the School, S.A.E. please.

Posts available from September, 1976, unless otherwise stated.

SPECIAL SCHOOLS

ULVERSTON STONE CROSS RESIDENTIAL SPECIAL (S.S.N.M.)
Senior Boys
Ulverston, Cumbria
January, 1977.
General and Careers.
Scale 2(5) plus residential emoluments available to suitable applicant.

WHALLEY LANEHEAD (Group 7) 112 S.N.(S) on roll
Cuddington, Milton Road, Whalley, Blackburn
January, 1977.
Deputy Head Teacher for Hospital School.
Dip.Ed. H.C. required.

SECONDARY SCHOOLS

DEPUTY HEADSHIPS

LANSHIRE COUNTY SECONDARY
Broadway, Fleetwood FY7 9HE (No. on roll approx. 550)
January, 1977.
Second Deputy Head (Group 10) to take charge of other Tuna-Table Curriculum, i.e. Director of Studies OR Pastoral Officer, i.e. Director of Guidance.

BLACKBURN SHADSWORTH SCHOOL/COMMUNITY CENTRE
Shadsworth Road, Blackburn BB1 2HT (1,160 mixed)
January, 1977.
Group 11

HEADS OF DEPARTMENTS

LANSHIRE COUNTY SECONDARY
Broadway, Fleetwood FY7 9HE (No. on roll 550 approx.)
January, 1977.
Modern Languages/European Studies to teach French/European Studies to O' level/G.C.E. and to develop German/Latin within the school. Reorganisation scheduled for September, 1977.
Scale 4.

OSKINSKIRK CROSS HALL HIGH SCHOOL
Wigan Road, Oskinskir, Lancs. LA2 2AT (1,450 mixed)
January, 1977.
Science Department, Physicist.
Scale 4.

SKELMERDALE AND HOLLAND TAWD VALE HIGH
Hollands Road, Skelmersdale (opened 1975)
1st January, 1977.
(1) Behavioural Studies.
Scale 4.
(2) Music.
Scale 2 or 3.

SCALE 2 POSTS

SKELMERDALE AND HOLLAND TAWD VALE HIGH
Hollands Road, Skelmersdale (opened 1975)
1st January, 1977.
MATHEMATICS TEAM CO-ORDINATOR.

SCALE 1 POSTS

MILLFIELD COUNTY SECONDARY SCHOOL (1,020)
Belvedere Road, Thornton Cleveleys
Physicist.
Temporary Appointment for one year.

BLACKPOOL GREENLANDS HIGH SCHOOL FOR GIRLS
Blackburn Road, Blackpool (1,250 girls)
(a) Physical Education.
(b) Science.

REPTON, TULSKETH HIGH SCHOOL (800 mixed)
Tos Lane, Repton, Derby DE2 3TA
Geography and Maths and other subject qualified.

LEYLAND RUSSELL COLLEGE
Langdale Road, Leyland, Preston PR5 2DQ
Co-educational sixth form college of 550 students.
Chemistry to G.C.E. Advanced level.

BURNLEY BARDEN HIGH
147 Bury (1,150 mixed)
Head Road
Teacher of English as a second language in the Immigrant Department.

BACUP AND HAVENSTALL GRAMMAR
Waterloo Road, Baccanale (750)
Physics to 'A' level.

WHITWORTH HIGH (850)
Half Fold, Whitworth, Rochdale
Maths and Science.
Temporary September-June.

BACUP PEARNS C.B. (1,400)
Parnes Road, Bacup, Lancashire
Mathematics.

History

Other Posts on
Scale 2 and above

KENT
KENT COUNTY COUNCIL
EDUCATION DEPARTMENT
MIDWAY DIVISION
101 LUTON SECONDARY
School, Luton, Bedfordshire
Mantle Hall Road, Chatham
Kent, SE18 2JH
Head of History, experienced, to teach History, Geography and Modern Studies to O' level/G.C.E. and to develop German/Latin within the school. Reorganisation scheduled for September, 1977.
Scale 2 or 3.

Scale 1 Posts

BIRMINGHAM 21
KENT COUNTY COUNCIL
EDUCATION DEPARTMENT
MIDWAY DIVISION
101 LUTON SECONDARY
School, Luton, Bedfordshire
Mantle Hall Road, Chatham
Kent, SE18 2JH
Head of History, experienced, to teach History, Geography and Modern Studies to O' level/G.C.E. and to develop German/Latin within the school. Reorganisation scheduled for September, 1977.
Scale 2 or 3.

EAST SUSSEX

EAST SUSSEX
EAST SUSSEX COUNTY COUNCIL
EDUCATION DEPARTMENT
101 LUTON SECONDARY
School, Luton, Bedfordshire
Mantle Hall Road, Chatham
Kent, SE18 2JH
Head of History, experienced, to teach History, Geography and Modern Studies to O' level/G.C.E. and to develop German/Latin within the school. Reorganisation scheduled for September, 1977.
Scale 2 or 3.

HAMPSHIRE
THE WATKINS COMPREHENSIVE
School, Southampton
Mantle Hall Road, Chatham
Kent, SE18 2JH
Head of History, experienced, to teach History, Geography and Modern Studies to O' level/G.C.E. and to develop German/Latin within the school. Reorganisation scheduled for September, 1977.
Scale 2 or 3.

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EDUCATION DEPARTMENT
MIDWAY DIVISION
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Lancashire
County Council

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Senior Boys
Ulverston, Cumbria
January, 1977.
General and Careers.
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Cuddington, Milton Road, Whalley, Blackburn
January, 1977.
Deputy Head Teacher for Hospital School.
Dip.Ed. H.C. required.

SECONDARY SCHOOLS

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January, 1977.
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BLACKBURN SHADSWORTH SCHOOL/COMMUNITY CENTRE
Shadsworth Road, Blackburn BB1 2HT (1,160 mixed)
January, 1977.
Group 11

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Scale 4.

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Hollands Road, Skelmersdale (opened 1975)
1st January, 1977.
(1) Behavioural Studies.
Scale 4.
(2) Music.
Scale 2 or 3.

SCALE 2 POSTS

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Hollands Road, Skelmersdale (opened 1975)
1st January, 1977.
MATHEMATICS TEAM CO-ORDINATOR.

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Physicist.
Temporary Appointment for one year.

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Blackburn Road, Blackpool (1,250 girls)
(a) Physical Education.
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Co-educational sixth form college of 550 students.
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Temporary September-June.

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Mathematics.

BEDFORDSHIRE

BEDFORDSHIRE
BEDFORDSHIRE COUNTY COUNCIL
EDUCATION DEPARTMENT
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HAMPSHIRE
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KENT COUNTY COUNCIL
EDUCATION DEPARTMENT
MIDWAY DIVISION
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Lancashire
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January, 1977.
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January, 1977.
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Shadsworth Road, Blackburn BB1 2HT (1,160 mixed)
January, 1977.
Group 11

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BEDFORDSHIRE COUNTY COUNCIL
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KENT COUNTY COUNCIL
EDUCATION DEPARTMENT
MIDWAY DIVISION
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January, 1977.
Group 11

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Chemistry to G.C.E. Advanced level.

BURNLEY BARDEN HIGH
147 Bury (1,150 mixed)
Head Road
Teacher of English as a second language in the Immigrant Department.

CDU 465

PLEASE APPLY TO THE PERSON
NAMED FULL DETAILS AND TWO RE-
COMMENDATIONS TO THE FOLLOWING
SECRETARY, 1101 CHURCH ST.,
LITTLE ROCK.

RECOMMEND FOR BIOLOGY, if
possible, to include field expe-
rience by the applicant, and
to level 152 work.
Preference may be needed for
boys, and for students with
qualifications to be exempt
from Freshman's training
courses.

MAINTENANCE DIVISION

GEOLOGICAL MANOR SCHOOL
Boughton Lane, Mansfield
Group 12 Educational Institutions
Schools
Director, Southgate, Ont.

[illegible]

further details and applications on request. The enclosed envelope contains the Principal at the College, Lancaster. The envelope is weak from appearance of age.

LONDON, SW2 3BR
 STRATHMAN HILL
 CHAPMAN HILL SCHOOL
 100, Strathman Hill
 Girls' Public Day School Trust
 London. Direct Grant: Yes
 Founded September 1961
 At present 100 girls
 Admitted to School to 6 and 11
 Apply to the Headmaster (via particulars, with names and addresses)

NEWCASTLE UPON TYNE
 (City of)
 ST. ANDREW'S CATHOLIC
 SCHOOL
 100, St. Andrew's Road
 Founded for September, 1961
 At present 100 girls
 Admitted to School to 6 and 11
 Apply to the Headmaster (via particulars, with names and addresses)

[illegible]

NORTHERN IRELAND
Roadway No. 10
FOVLE COLLIVE AND
LONDONDERRY 1001
is the intention of
Governors to assignate if
two schools to form a
national Grammar School
for pupils.
TEACHER
control for teachers' in
chemistry
names and addresses of
persons to be in the
Londonderry, Fovle Coll
Springtown, Londonderry
persons who have are
persons who automatically
considered and need not
apply.

Adviser for Education

Education Adviser for a third
ing Bridgewater, and to take
physical education through
the in-service training, mainly
January, 1977.
Details (stamped address)
(7) Section, Education
Taunton TA1 4DY. C

Salary, Lecturer Grade II, £3,591 to £5,805

(i) To act as Physical Education Adviser for a third of the County surrounding Bridgewater, and to take an active interest in girls physical education throughout the County.

(ii) To concentrate on the in-service training, mainly in primary schools.

Duties to commence January, 1977.

Application form and details (stamped address envelope) to: Mr. J. H. B. (T) Section, Education, County Hall, Taunton TA1 4DY. Cf. date July 19, 1976.

WEST MIDLANDS COUNTY COUNCIL

TRANSPORTATION AND ENGINEERING DEPARTMENT

ASSISTANT ROAD SAFETY OFFICER

£4,239-£4,992

To assist in the initiation, implementation and supervision of road safety education, publicity and training. A knowledge of modern teaching techniques and audio visual aids essential.

For further details and application form write or phone, quoting post ref TE 3930 to Personnel Officer, West Midlands County Council, 1 Lancaster Circus, Queensway, Birmingham B4 7DU. Tel. 021-359 5373. A telephone answering service in operation out of office hours. Return applications by 20th July 1976.

Bedfordshire

Educational Psychologist

Salary Scale £3,990-£6,660 plus £312 Pay Award

The person appointed will be based in the Southern Area Education Office, Luton and should have an Honours Degree in Psychology, teaching experience and postgraduate training. Preference will be given to candidates with experience of work in a Local Authority Psychological Services. Essential User Car Allowance and Car Loan Scheme.

Approved removal expenses paid.

Further particulars and application forms from D. P. J. Browning, M.A., Chief Education Officer, County Hall, Bedford, or telephone Mr K. Fossey, Bedford 63222 ext. 246. Closing date 23rd July 1976.

Bedfordshire

Applications are invited from suitably qualified and experienced candidates for the following posts in the Education Department:-

- 1) Assistant Education Officer (Further Education)**

Salary scale PO2 (a) £5,889-£6,564 (Plus award of £312).

Applicants should be graduates with teaching experience. Preference will be given to candidates with administrative experience in a Local Education Authority Department.

- 2) Professional Assistant (Schools & Further Education)**

Salary scale £4,239-£4,992 (N.J.C. A.P.T. and G. Scheme Points 31-35). (Plus pay award of £312).

Applicants should be graduates with teaching experience. This post should be of interest to teachers seeking an initial appointment in L.E.A. administration.

Both posts carry Essential User Car Allowances and the Authority operates a Car Loan Scheme.

Approved removal expenses paid.

Closing date 23rd July 1976.

Application forms and further details from D. P. J. Browning, M.A., Chief Education Officer, County Hall, Bedford, or telephone Mr K. Fossey, Bedford 63222 ext. 246.

ADMINISTRATION
General continued

LEICESTERSHIRE

Loughborough

UNIVERSITY OF TECHNOLOGY

CANDELL ADVISER

Applications are invited for the post of Candell Adviser to assist in the selection of candidates for admission to the University of Technology, Loughborough. The successful candidate will be responsible for the selection of candidates for admission to the University of Technology, Loughborough. The successful candidate will be responsible for the selection of candidates for admission to the University of Technology, Loughborough.

LONDON

MIDDLESEX POLYTECHNIC

TECHNICAL DESIGN OFFICER

£3,193 to £5,545 per annum plus £312 supplement

A responsible job dealing with the technical design of products. The successful candidate will be responsible for the design of products. The successful candidate will be responsible for the design of products.

LONDON

NATIONAL ASSOCIATION OF BOYS' CLUBS

17 Bedford Square, London, W.C.1

APPOINTMENT OF CREATIVE ACTIVITIES OFFICER

Applications are invited for the post of Creative Activities Officer. The successful candidate will be responsible for the creative activities of the club. The successful candidate will be responsible for the creative activities of the club.

Child Care

DEVON

THE CHARLES HORTON

Widened, near Cullington

Applications are invited for the post of Child Care Officer. The successful candidate will be responsible for the child care of the club. The successful candidate will be responsible for the child care of the club.

DURHAM COUNTY COUNCIL

Following a retirement, applications are invited for one of our four posts of

Area Senior Educational Psychologist

In the Durham City area.

In our Education Department-based team of twenty which also includes the County Educational Psychologist, four senior educational psychologists are responsible for the provision of guidance of the work of the psychologists based in area teams. They also have a continuing case-work commitment in the provision of a child guidance service. The successful candidate will be responsible for the provision of a child guidance service. The successful candidate will be responsible for the provision of a child guidance service.

Educational Psychologists

CAMBRIDGESHIRE

HUNTINGDON AREA

BOURN

Applications are invited for the post of Educational Psychologist. The successful candidate will be responsible for the educational psychology of the club. The successful candidate will be responsible for the educational psychology of the club.

HERTFORDSHIRE

ST. ALBANS

TECHNICAL DESIGN OFFICER

£3,193 to £5,545 per annum plus £312 supplement

A responsible job dealing with the technical design of products. The successful candidate will be responsible for the design of products. The successful candidate will be responsible for the design of products.

LONDON

MIDDLESEX

PSYCHOLOGIST

£3,193 to £5,545 per annum plus £312 supplement

A responsible job dealing with the psychological aspects of the club. The successful candidate will be responsible for the psychological aspects of the club. The successful candidate will be responsible for the psychological aspects of the club.

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ASSOCIATED LANCASHIRE SCHOOLS EXAMINING BOARD

Certificates of Secondary Education

Applications are invited for the post of Examiners. The successful candidate will be responsible for the examination of candidates. The successful candidate will be responsible for the examination of candidates.

LANCASHIRE EDUCATION AUTHORITY

APPOINTMENT OF EDUCATIONAL PSYCHOLOGISTS

Salary Range: Educational Psychologists' Scale: £3,840-£6,660 plus Annual Salary Supplement (£312).

Applications are invited for appointment to the above mentioned posts in the following areas:

Area 1 (Lancaster and Wyre)

Area 2 (Blackpool, Fylde and Preston)

Area 3 (Burnley, Pendle and Rossendale)

Applicants should possess an Honours degree in Psychology, teaching experience and post graduate training in educational psychology or equivalent qualification.

CATHOLIC SOCIAL SERVICES, LIVERPOOL

WARDEN (Intensive Care Unit)

Applications are invited from suitably qualified and experienced candidates for the post of Warden. The successful candidate will be responsible for the wardenship of the club. The successful candidate will be responsible for the wardenship of the club.

DEPUTY WARDEN (Intensive Care Unit)

Applications are invited for the post of Deputy Warden. The successful candidate will be responsible for the deputy wardenship of the club. The successful candidate will be responsible for the deputy wardenship of the club.

Librarians

SOMERSET

EDUCATION COMMITTEE

THE WEST SOMERSET SCHOOLS EXAMINING BOARD

Certificates of Secondary Education

Applications are invited for the post of Examiners. The successful candidate will be responsible for the examination of candidates. The successful candidate will be responsible for the examination of candidates.

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LEISURE DEPARTMENT

HOWE BRIDGE SPORTS CENTRE, ATHONTON

Comprising a general purpose Sports Hall with seating for up to 750, a separate gymnasium, weight training room, 25m x 12.5m swimming pool, and 10m x 12.5m leisure pool, sauna and solarium, three squash courts, lounge room, canteen, two bar lounges, informal meeting areas, restaurant and cafeteria. The outdoor area provides a floodlit all weather pitch, two grass pitches, cricket square, and a general area designated for many club activities.

MANAGER (Ref. W192)

Salary Grade SO2 £4,889-£4,992

We are seeking candidates of the highest calibre for the post of Manager at this unique and prestigious Sports Centre, at present under construction, and due to open in November/December 1976.

Candidates should have proven ability in the management of a wide range of sporting and recreational activities and previous experience in managing a similar centre would be an advantage.

ASSISTANT MANAGER (Ref. W199)

Salary Grade AP5 £3,825-£4,095

Required to help the Manager to develop the services at the Centre to plan, programme, etc., and to assist in the general management of the Centre. Specific areas of responsibility may be allocated as necessary.

RECREATION SUPERVISORS (2)

(Ref. W200)

Salary Grade Technical 3 £2,922-£3,282

These two Recreation Supervisors will be responsible to the Manager or, in his/her absence, the Assistant Manager, for the day-to-day supervision of the Centre. They will be expected to contribute to the organisation of coaching courses and will hold specific coaching awards.

SCHOOLS COUNCIL

THE SCHOOLS COUNCIL

INDUSTRY PROJECT

Appointment of an EVALUATOR

The national importance of a closer and more effective association between industry and education is being increasingly recognised. The aim of the Schools Council's Industry Project, evolved with the help of the CBI and the Government, is to make a significant contribution in this field. We believe that there are opportunities to develop new curricula and methods, to establish relationships and to engage activities which allow participants from industry and education to collaborate in the processes of educational change.

Applications are invited for the post of EVALUATOR of the project, which is planned to begin in 1978 and last for four years. It is envisaged that there will be an initial diagnostic phase when the director and evaluator will identify needs, opportunities and objectives.

The salary for the evaluator will be in the region of £5,000-£6,000 or, alternatively, secondment may be arranged at existing salary plus honorarium. The evaluator, appointed to this complex project will have extensive experience of curriculum research and evaluation.

Application forms and further information may be obtained from Mr. A. Marshall, Schools Council, 180 Great Portland Street, London, W1M 6LL. Tel. 01-580 0352 extension 351. The closing date for the receipt of applications is Friday, 30 July 1976.

Somerset

Education and Cultural Services Committee

AREA EDUCATION OFFICER

Applications are invited for the post of Area Education Officer (East Somerset). Candidates for this senior advisory and administrative post must be qualified teachers with wide professional experience and may have experience in educational administration.

The salary will be in accordance with the Southbury Scale for senior advisers, currently £7,455 to £8,079 plus £312 (Group 10).

Application forms, which should be returned by July 16, and further details are obtainable from the Chief Education Officer (Staffing NT), County Hall, Taunton.

Leicestershire

Second Assistant Deputy Director of Education

£8,541 to £9,159 per annum

Applications are invited for this fourth Senior Post in the Education Department. Candidates must be graduates with teaching and educational administrative experience. Further details on request (Tel. Leicester 871313 Ext 258).

ESSEX COUNTY COUNCIL

County Education Office

County Inspector (with special responsibility in SCIENCE)

Soulbury scale 10 £7,767-£8,391

Required for January 1977 to join the County's team of general inspectors and to hold special responsibilities in Science. Candidates who should hold graduate qualifications in Physics, should have successful experience as advisors or teachers in posts of senior responsibility in schools. They should have a genuine interest in the whole field of education. The post is open to male and female applicants.

Application forms and further details from the County Education Officer (G), P.O. Box 47, Thredboe House, Market Road, Chelmsford CM1 1LD, telephone Chelmsford 67222 ext. 2608.

NATIONAL UNION OF TEACHERS

Appointment of REGIONAL OFFICIAL

For Regional Area 5

Staffordshire, Warwickshire and the West Midlands

Applicants are invited from members of the Union for an appointment as a Regional Official. The successful candidate must devote his/her time exclusively to the duties of the office and must not undertake any other public obligations without the consent of the Executive.

The person appointed will be required to take up the post on 1st January, 1977, or if possible at an earlier date in agreement can be reached between the successful applicant and his/her employing Authority.

Continuity of service may be had on application to the General Secretary.

Salary: £6,348 by annual increments of £126 to £6,972. The person appointed will be eligible for the benefits of the Staff Superannuation Scheme, subject to satisfactory evidence of health.

LAKE DISTRICT NATIONAL PARK

YOUTH AND SCHOOL LIAISON OFFICER

(A.P. 3/4 £3,234-£4,014)

Applications are invited for the vacancy of Youth and School Liaison Officer whose duties will involve the provision of assistance to teachers, leaders and groups of young people to help them gain a better understanding and appreciation of the National Park.

LEEDS CITY COUNCIL

DEPARTMENT OF EDUCATION

Careers Service

Careers Officer

AP.4 £3,366-£3,702 plus £312 p.a. supplement

The Officer appointed will work in a team providing vocational guidance facilities in the West area of the City.

LONDON BOROUGH OF CROYDON

APPOINTMENT OF GENERAL INSPECTOR OF SCHOOLS TO SPECIALISE IN PRIMARY EDUCATION WITH PARTICULAR REFERENCE TO THE YOUNGER CHILD

Applications are invited for the post of Inspector of Schools. Applicants should have a good Honours Degree and sound experience as a teacher, plus experience in the advisory service and/or in senior posts in schools and colleges.

Writer and community

Shirley Toulson

In the mass of polite applause which greeted Lord Redcliffe-Maud's recent report on the provision of support for the arts in England and Wales, two specific proposals that he made were almost completely ignored. They relate to the special link between writers and education. He recommended that "The writers-in-residence" arrangement should be encouraged at institutions where use can be made of carefully selected writers; and that "Local authorities should be prepared to subsidize the use of writers in schools and colleges".

The second demand really precedes the first. It is realistic, at a time of severe economic restriction, to imagine that local authorities will be prepared to add to their financial commitments? Against all the odds, it seems that in places where "writers-in-residence" schemes have been proved valuable, the authorities are somehow prepared to find a bit of extra money. So, for instance, in the Inner London Education Authority, two schools which have not previously benefited from the C. Day Lewis Fellowship scheme are each prepared to appoint a writer next September, and to give a percentage of the £1,500 award which every writer receives for attending the school to which he is appointed for a minimum of two days a week throughout the autumn and spring terms. The two schools coming into the scheme for the first time this year are

Yuxhall Manor and Rutherford School, Maryland. They will find their money being well spent if, as Lord Redcliffe-Maud puts it, the writer is carefully selected for the post. In addition it is important that the teachers at each school know how to make the best use of whoever is appointed. Obviously there are difficulties; the most acute being the demarcation between the work of the teachers on the staff and the writer-in-residence. At a time when staff are being cut back, and part-time teachers are particularly vulnerable to the cuts, misunderstandings and difficulties are bound to arise over the writer's role. Some teachers have objected to writers in their schools, who include some mention of formal grammar during their sessions on creative writing and who would argue that a proper use of language is simply a tool of their craft. They see this emphasis as a trespass on their teaching function.

Laurence Baylis, literature officer of the Greater London Arts Association, who is concerned with the annual administration of the C. Day Lewis award, is keenly aware of these difficulties. He would like to see courses or weekend conferences arranged for the writers-in-residence, so that they could decide how to make the best use of such an appointment. So far, nothing of

that nature has been planned, but a meeting which will look at the matter from the artists' point of view will be held at the Institute of Contemporary Arts in London on July 13.

The Calouste Gulbenkian Foundation, which published the Redcliffe-Maud report, and which has put up the money for various artists-in-residence schemes since 1973, is involving several of the people who have such posts, awarded by various organizations, to come and pool their experiences. The main purpose of that meeting is to further a book about artists-in-residence which Sir Brudenell Thorne is preparing, and which the Foundation is to publish next summer.

Most of the artists who will be attending that meeting will not, in fact, be writers. The Foundation is particularly interested in fostering community arts; and tends to appoint musicians, painters, and even film-makers, whose work will lead itself to community projects. If a writer is appointed it will usually tend to be a playwright.

The poet and novelist Peter Redgrove, who has been on the full-time staff of Falmouth College of Art for the last 10 years, puts rather a different emphasis on the matter. His main concern is with the transmission of the skill and craft of an art; and he argues that as painting is taught by painters, so

should writing be taught by practising writers. He feels that the bodies concerned with writers-in-residence schemes would do well to turn their attention to the colleges of art, where students, freed from the academic inhibitions of the universities, could learn to become craftsmen with words, in much the same way as their colleagues learn the basic rules of design and the skills of the visual arts.

The novelist and biographer Paddy Kitchen, who touched on this subject in fictional form in *Linsey Woolsey* (and who spent some time at Falmouth College of Art while Peter Redgrove was on sabbatical leave) naturally shares this view. She has also had experience of being a writer-in-residence at a school. She was at Woodberry Down from 1973-4, and there she found that, as well as encouraging pupils with their own writing, she was able to help them to make sense of contemporary literature, and to find their way around the new forms of poetry and fiction of the 1970s.

It could be argued that a writer who is so engaged can have little time to set on with his own writing; and this may cause some difficulties among writers who are really looking for patronage, or for the means to finish a particular piece of work, rather than for employment in a particularly demanding job. The writers-in-residence

appointments all carry full-time commitments to the appointing institutions, and they are not to be confused with the Council bursaries, which are awarded for specific pieces of writing.

Yet the writers come forward in great numbers for the various residencies. Laurence Baylis calculates that some 100 to 150 people go each year for the C. Day Lewis residencies, which gives the scheme a wide range to choose from. Obviously the selectors are going to apply purely literary criteria when they come to make their decisions. They will be looking for those writers who are likely to get along with the pupils.

Yet this does not mean that writer-in-residence will completely abandon his craft for the duration of his appointment. In fact he may frequently turn out to be a very useful source of copy, as late 1960s during his time as Granada Fellow in the arts at the University of Lancaster. Mitchell managed to complete a novel and lay the foundation for two plays as well as founding a drama workshop among the pupils and staff of the school.

And Verna Scammell, who is currently a community writer-in-residence for Oxfordshire, has been commissioned by Robin Mitchell to write about his experience

Cupid prefiguring death

Michael Clarke on Aubrey Beardsley

Beardsley and his World. By Brigid Brophy. Thames and Hudson £3.50. 500. 130574.

"Don't let Vallance give the public the idea that I am 45 and have been working for 15 years; but give people the impression that I am two and have been working for three weeks", Beardsley wrote to his publisher towards the end of his life. He need not have worried. Like another, in many ways similar artist, Ronald Firbank, Beardsley is thought lacking in seriousness—his music, his art, his life, his death, his brilliant and humorous. He has been relegated to the rank of minor artist. The precocious child image has stuck.

Brigid Brophy has already succeeded in doing such a view of Firbank, and her 1968 book on Beardsley's art, *Black and White*, came as a revelation. As potently laconic as her subject and without for one moment doubting his seriousness as an artist, she began with the declaration, "The artist is a 19th-century man, a very great artist—the most intensely and electrically erotic artist in the world."

But he is an erotic artist for whom Cupid himself can prefigure death. This new book is necessarily different. As a biography it is chronology that directs, but does not dictate, the form. Brigid Brophy has seized on the fact that Beardsley, a consumptive from seven years old, was almost as soon aware of his end as he was of his beginning, and she makes us see how the voyeuristic child became the sophisticated artist through a process of relating all later experiences, characters and events to the child who remained at their centre. All his life Beardsley kept returning to earlier places and from the fact of his life (some of which she has corrected) Brigid Brophy has built an elegant picture of the man and the artist.

The man was of the nineteenth century, but the artist is of the twentieth. Like several others he became modern in part by returning to the past; in this case, more imitator of the past than a creator. He judged Morris's work to be, but "a wholesome seventeenth-century standard of what picture-making should be". To sharpen the difference he took to the past, the past in reproduction, his 1894 essay, "The Art of the Handwriting", specifically rejected "The general feeling that the artist

who puts his art into the poster is declassé—on the streets—and consequently of light character." His own pictures were drawn by mechanical lighting and mechanically reproduced in books; he must have known that they would very likely be looked at under similar conditions. Without individual brushstrokes, modelling any other of the qualities associated with the unique work of art, all his work and even his caricatures based on rarely became irrelevant. His work was and is available to all. The aesthetic values remain intact no matter how many times the image is reproduced.

If those aesthetic values were made more vividly real in *Black and White*, Brigid Brophy does not fail to make them clear in her new book. The tension of the beautifully composed pictures is the tension of eroticism itself and in Beardsley's hands everything became erotic. "You see even my teeth are a little erotic." His imagination exploded in a "polygraphous universality" of childhood and the matter of his art was made more convincing by the abstract force of his designs. Perhaps the two books should be read as complementary. Together they ought to raise Beardsley from a minor to a major artist.

Observations of Georgia

In the last few years we have gradually become aware of the existence of a distinctive, exuberant National cinema in the Soviet republic of Georgia—paradoxically, perhaps, that visitors have felt travelling to Tbilisi after Moscow. But until the cinematic season of Georgian Cinema currently running at the National Film Theatre in London (claimed as the largest ever mounted by any cinematic festival), there had been little chance to sample it, except for Georgy Shengelaya's *Prosmeni*, the brilliant biographical study of a Georgian native painter from the turn of the century that so perfectly evokes the painter's vision through the style of the film. This has been screened in London and regional film theatres, and on BBC2.

Here one also has the chance to survey some outstanding examples from half a century of cinematic development—though the season concentrates on films of the last decade. Many of these, like *Prosmeni*, are safely distanced from contemporary social and political issues, conveying an affectionate and unclouded impression of life in Georgia at the turn of the century.

The *Ecstasies* (by Shengelaya's brother, Edder) and a musical, *Melodier of the Vera Quarter* (which Shengelaya made after *Prosmeni*), are both enjoyable, slightly flawed, but distinctive.

But some films do reflect contemporary life from the last decade. Recent reports, notably in *The Sunday Times*, indicate that new leaders are now striving to bring Georgia into line with the rest of the world, away from the kind of economic exuberance that could only have survived with the acquiescence, if not positive connivance, of the old Georgian leadership.

But one can still appreciate that former spirit (1957 vintage) through the gently satirical social observation of possibly the most enjoyable film in the season, *When the Leaves Fall* (Lisped). It is about two lads in Tbilisi and the ambience of spivvy, "nekiurny" peers loafing on the streets. The two start working as apprentice scientists in

the local wine-bottling plant, where they find the working life language and the corrupt manager spends his time playing billiards and encouraging widespread adulteration of the wine—so much so that the workers themselves steer well clear of it.

In and beautiful scenes, the older workers take the two lads to a café for a celebration, but when the bottle arrives—the only house wine available, from their own factory—they spit the date on the bottle, salute obediently to the slightly terrible events that all remember, and leave immediately. Much in the subtly sketched relationships is universal: the workers are particularly friendly because the father of one of the lads had been a workmate in the factory.

What is remarkable is not simply that such attitudes exist, nor even that they should be depicted in film, but that they should be prefigured without any trace of heavy censorship. Let's hope that other regional theatres get a chance to see this and other films from this intriguing season.

John Grogan

Camera on campus

Diane Spencer on a new gallery at Southampton

A narrow doorway next to the bookshop on the campus of Southampton University, which once led exclusively to the Vice-Chancellor's study, now leads to the country's first university photography gallery.

The prints are hung in the narrow confines of an entrance hall and on the grey concrete walls which wind round the stairwell of a spiral staircase; a small, awkward space in which to run a gallery, but Leo Sibley, its director, was happy to get any space at all when he first opened the gallery three years ago.

He was once an administrator in the university registry and ran the gallery in his spare time for two years before deciding to start on a more ambitious project—to convert an enormous, hitherto unused space in the medical block into a huge gallery, to create a photographic archive, and also to initiate fellowships in design and photography.

So far the Arts Council and the Pilgrim Trust have promised £12,000 towards the £50,000 capital needed for the project. A further £22,000 will be needed for running costs and about the same amount for staff salaries; an appeal was launched last week.

Mr Sibley hopes to open the gallery next February, and so far there is an impressive list of patrons and promises of support from various companies and individuals. He intends to "package" the design and photography fellowships with sponsorships. This, he believes, will follow in the tradition already established in the university which already has a fine arts fellow and a creative writer.

The new gallery will be in a large complex of corridors surrounding lecture theatres in a recently built medical block. After reading an

existing gallery put on a show of old Southampton which was a success. "They came, they saw, they conquered," Mr Sibley says. This convinced him that he, as a people, as well as university students and staff, were interested and there was a vast untapped source of old pictures in archives, libraries and attics which the gallery could catalogue and show.

This summer the present plan is showing an exhibition of photographs taken by schoolchildren, and will be regular exhibitions of work by local students.

Festival at Montreux

The celebrated teacher of violin, Itzhak Cohen, is to lecture on her teaching method at the twelfth Conference of the International Society for Music Education in Montreux. Miss Cohen will be accompanied by seven of her pupils (ages ranging from 8-18) who will perform at different stages of achievement.

The Gosforth High School, Leamington, is to perform at the twelfth Conference of the International Society for Music Education in Montreux. The school's percussion-based orchestra, directed by a new teacher, Miss Cohen, will perform at different stages of achievement.

On general release

Christopher Griffin-Beale

For television for schools has been the term, most school teachers will be standing forlornly in the corridors, wondering how to get their hands on the video cassette which will be the key to a new way in a humid classroom.

All the year round, however, there is a range of continuing daytime programmes—almost exclusively on the subject of the inoffensive *Pebbles* which might be exploited in the classroom to stimulate discussion, but in secondary schools.

The educational use of non-television television has received attention. Michael L. Scarth, a college of education lecturer, prepared a report with this title under the title *Teacher-Follow-up Scheme* in 1973. But that report concentrated on evening programmes that might stimulate classroom discussion about television and its effects.

However, such discussion is hampered by the difficulty of bringing the subject into the classroom, even if the school did have video recorder facilities. For non-educational programmes cannot legally be shown in schools.

But the educational use of television can be used in a way that is not hampered by the difficulty of bringing the subject into the classroom, even if the school did have video recorder facilities. For non-educational programmes cannot legally be shown in schools.

Interspersed with this discussion, filmed interviews—with businessmen and pensioners' representatives—were used to summarise more of the argument. Co-ordinator Tony Bastable's introduction lucidly summarised the historical development of the two systems of measurement—measuring their confusion with a piece of film, whose length was measured in feet and width in millimetres.

The programme usually includes an assortment of items, and each month examines the cost of its shopping basket of representative items, explaining the reasons for specific rises. Occasionally the programme might be judged jolly. More seriously an item might seem rather odd, included only for its entertainment value, like the recent case of a woman who bought a new dress only to find it was a wardrobe outlay for the jury-minimising for extras. But Granada's programme is a welcome addition to the public's knowledge of the world of television and its effects.

Producers Mary McAnnally is eager to distinguish the series from Esther Rantzen's highly popular Sunday night show, *That's Life*, arguing that *Money-go-Round* performs a more clearly educational function. One should not underestimate the general value of *That's Life* in raising consumer consciousness, and it does sometimes achieve results for individual complainants, but its main function for its audience is entertainment. Within the constraints of its format, *Money-go-Round* does a useful job, and teachers might profitably sample it.

Of course, there are many other series that could be used. *Home Brew* Thames's new adult education series about beer making (currently running on Monday mornings in London, but to be shown elsewhere at different times, possibly in the day), might be used to lead to all kinds of intriguing experiments with a suitably enthusiastic home economics—or chemistry—teacher.

But, seriously, we do not know the classroom potential of any of these series, which has made this programme of an informal survey necessary. We would be greatly interested to hear of any experiences with these or other programmes—so as to more confidently return to the subject in future issues. There might be a value in repeating, as has happened on occasion, current affairs programmes such as *World in Action* or *The Week* in the classroom, at least schools—as well as home audiences—might see them.

formation is negligible) *Money-go-Round* can convey useful general information painlessly.

There may be more fundamental economic questions to be discussed, perhaps, but outside *The Money Programme* you will be hard pressed to find them tackled in television, certainly for schools. The BBC 2 further education series, *Peter Donaldson's Illustrated Economics* was repeated on Tuesday afternoon, primarily for colleges, though sixth forms might have used it. Meanwhile, a discussion of the falling pound, on a recent *Money-go-Round* though brief and leaning solely on one expert opinion was nevertheless lucid.

Last week's programme was devoted entirely to matriculation, which, like many subjects in this field, display the potential hazards of boredom and confusion for anyone trying to communicate their essential importance. The programme nearly succeeded. Matriculation certainly did not seem boring and the only confusion was due to the persistent refusal of the studio guests—including John Fraser, the Government minister responsible for matriculation—to apply any concrete time scale to what they variously argued was a suitably gentle or excessive haste to advance to matriculation. This was not for want of prompting by presenter Joan Shepton.

Future programmes will include a look at the Pimpler, Au Nature reserve in Southern Bavaria; the development of life on the mountains of the Dolomitic Alps; vegetable programmes can be used in a way that is not hampered by the difficulty of bringing the subject into the classroom, even if the school did have video recorder facilities. For non-educational programmes cannot legally be shown in schools.

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Channel crossings

Carolyn O'Grady

David Bellamy's style is now well-known. You either like it or you do not. He began the first *Bellamy's Europe* (BBC 1, Thursday), a series on Europe's natural life, in typical fashion with a plunge into the Channel from a bathing machine, emerging on the French coast to leap from one plant and animal to another (and from one side of the differences to another) spouting the differences between the two sides.

"Vive la Difference" was the title of the programme and the subject a fascinating one. The edible flora, the ivy and yew to Britain. Some flowers whose seeds are blown across from France will not grow in England and many varieties of toads, newts and lizards were obstructed by the Channel in their migration northwards.

The programme did not supply more than superficial answers to the questions it posed. But it crossed the imagination effectively and would probably send many people with or without a previous interest in wild life and vegetation scurrying to find out more. Some of the film sequences, for example, an older giving birth, are beautiful and rare. Bellamy's enthusiasm is infectious, though his plodding French—"it doesn't parlez anglais, at least not to me" (of the French landscape)—can be extremely irritating, and is unnecessary.

Future programmes will include a look at the Pimpler, Au Nature reserve in Southern Bavaria; the development of life on the mountains of the Dolomitic Alps; vegetable programmes can be used in a way that is not hampered by the difficulty of bringing the subject into the classroom, even if the school did have video recorder facilities. For non-educational programmes cannot legally be shown in schools.

Interspersed with this discussion, filmed interviews—with businessmen and pensioners' representatives—were used to summarise more of the argument. Co-ordinator Tony Bastable's introduction lucidly summarised the historical development of the two systems of measurement—measuring their confusion with a piece of film, whose length was measured in feet and width in millimetres.

The programme usually includes an assortment of items, and each month examines the cost of its shopping basket of representative items, explaining the reasons for specific rises. Occasionally the programme might be judged jolly. More seriously an item might seem rather odd, included only for its entertainment value, like the recent case of a woman who bought a new dress only to find it was a wardrobe outlay for the jury-minimising for extras. But Granada's programme is a welcome addition to the public's knowledge of the world of television and its effects.

Producers Mary McAnnally is eager to distinguish the series from Esther Rantzen's highly popular Sunday night show, *That's Life*, arguing that *Money-go-Round* performs a more clearly educational function. One should not underestimate the general value of *That's Life* in raising consumer consciousness, and it does sometimes achieve results for individual complainants, but its main function for its audience is entertainment. Within the constraints of its format, *Money-go-Round* does a useful job, and teachers might profitably sample it.

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Briefings

Radio and tv

Open University
Metemorphosis and the Habsburg Police (Saturday, 7.40. VHF 3)
The security of the Austrian Empire was ensured by an efficient secret police with all the trappings of censorship and informants. Palmerston warned Metemorphosis that his country was like a steam boiler without a safety valve. But...
How do You See Yourself? (Saturday, 10.10, Thursday 17.25. BBC 2)
Two very different sixth-form girls talk freely about themselves. Christine is shy and reserved, Margaret is communicative—"You don't realise what you think of yourself because it is so confused with what others think of you."
A Poet and Politics (Saturday 11.25, Wednesday 06.40. BBC 2)
John Cornford was totally involved in the life and death struggle of Spain in 1936. Friends and relations explore his contribution and the issue of a poet's relationship to life.
Beating the Bogle (Saturday 12.40, Tuesday 07.30. BBC 2)
British Rail engineers illustrate the problems of materials failing under stress. Follows a revolutionary locomotive built from design, through testing to its introduction into the new Inter-City 100 mph trains.

Why Overseas Doctors Come to the U.K. (Tuesday 06.40, Thursday 17.50. BBC2)
One third of doctors are now from overseas. It saves us money, but the immigration takes place against a background of appalling health problems in Third World countries.
The Pace of Austria (Wednesday, 18.14. BBC2)
Analyses the causes, progress and results of European revolutions. Photographs and film show how great were the difficulties facing reformers of semi-feudal systems of land tenure in a racially varied Empire.
General Interest
Euromagnum (Sunday 15.00 VHF4, Wednesday 19.00 Radio 3)
Start of a new German series for more advanced students. Includes material from German radio stations to help with the problem of keeping language alive.
Nations vs. Neighbours (Sunday 15.30. VHF4)
Predictions are that fewer people will be going abroad for their holiday. This three-part series looks at the people and traditions of Scotland, Wales and Ireland. In an attempt to make holidays at home more enjoyable.
Reading for Pleasure (Friday, 18.40. Radio 5)
Michael Parkinson takes part in his theme, introducing readings from his favourite books. Novel Carus, J. B. Priestley, and John Galsworthy are among the authors.
Special Report (Friday, 19.00. Radio 3)
West Dean College, Chichester, offers residential courses for adults. Intensive weeks are being increasingly accepted as useful educational experience. Maureen Galvin explores the particular possibilities of learning a new craft.
The Unquieted moment (Friday, 11.05. ITV)
Schoolchildren in Hampshire are given a first aid lesson and are shown how simple and effective a little knowledge can be. "You have four minutes" stresses the importance of time in saving life.

several places for solo cello: excerpts from *Fall of a Leaf* by Imogen Holst, Suite No. 4 by Bach, the front page and belly from Cowan, Bartok, Moor and Toch. "Making a Cello" can be hired from Concordia Films Council Ltd, Nacton, Ipswich, Suffolk, IP10 0JZ. The Crafts Advisory Committee are at 2 Waterloo Place, London SW1V 4AU.
from a comparison of plates of cello: by Amati, Stradivari, Imogen Holst, Suite No. 4 by Bach, the front page and belly from Cowan, Bartok, Moor and Toch. "Making a Cello" can be hired from Concordia Films Council Ltd, Nacton, Ipswich, Suffolk, IP10 0JZ. The Crafts Advisory Committee are at 2 Waterloo Place, London SW1V 4AU.
Roger Hill is himself a keen cello player and has included



Bellamy unites the rules.